WORK ENGAGEMENT AND BURNOUT AMONG PUBLIC AND PRIVATE SCHOOL TEACHERS

By

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DECLARATION

This is a confirmation that I, Ms Thuladu Bonhle Moremi, student number 201227109 enrolled for Master's in Industrial Psychology, College of Business and Economics at the University of Johannesburg, herewith declare that all the work included in this document is my own, except for the work that is recognised. I have not formerly submitted this minor dissertation for a degree to another university.

T.B.E. Moremi

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ABSTRACT

The teaching profession has been seen as one to nurture and develop the potential of learners. However, teaching today is noted to be one of the most complex and demanding professions because teachers are often faced with various difficult challenges with which they are not able to deal. These challenges include learning and unlearning information and skills, keeping up with new technology, and dealing with lethargic and problematic students, parents, and the community. Because of their demanding roles, there are growing concerns about the well-being of teachers. Specifically, teachers seem to be experiencing less work engagement and increased burnout because of increasing demands and limited resources. The aim of this study was to investigate the relationship between demands and resources and burnout and engagement among teachers in public and private schools. Using the JD-R, the study aims to gain a better understanding of how the availability or lack of job resources and job demands in private and public schools moderate work engagement and burnout. Using random sampling, a quantitative, cross-sectional survey design was used and administered to a sample of South African teachers. A total of n = 393 questionnaires were collected from both private (n = 189, 48.1%) and public schools (n = 204, 51.9%) in the Gauteng province of South Africa. The *Utrecht Work Engagement Scale* (UWES-9 item), the *Oldenburg Burnout Inventory* (OLBI), and the *Job Demands–Resources Scale* (JDRS) were used. Findings suggest that there are differences between the well-being of teachers in private schools and teachers in public schools, based on the available resources. It was found that teachers in public schools seem to experience more burnout and less engagement than teachers in private schools. However, it is not clear if job demands and resources may be the cause of this. There may be other factors within the schools that may result to the differences. Limitations and recommendations are presented.

Keywords: Teachers, well-being, work engagement, burnout, private school, public school, job demands, job resources, South Africa

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Work produces emotions of uncertainty, such as having to deal with various demands in possibly challenging environments, for many people (Rothman, 2003). From one perspective, work involves extreme effort, such as having to be present at work and/or limited flexibility, which might elicit negative attitudes (Omanukwue, 2013). From another perspective, work stimulates vitality, inspires improvement, and drives the generation of positive emotions among employees (Fisher, 2010; Fourie & Deacon, 2015; Stairs & Galpin, 2010). Consequently, work has the potential to provoke either burnout and illness (the former perspective) or well-being (the latter) (Schaufeli & Bakker, 2001). Well-being is the presence of physical and emotional health, happiness, and absence of illness/disease (Henn & Barkhuizen, 2009).

In the education sphere, the well-being of teachers has specifically gained momentum because of the stressful environment they are often exposed to in the workplace (Henn & Barkhuizen, 2009). These include, for example, lack of student discipline, curriculum changes, unsupportive parents, high volumes of workload with a short delivery time, and lack of career growth or progression in teaching. According to Vazi et al. (2013), being a teacher is often considered to be the most stressful profession and this stress regularly potentially leads to the development of burnout and/or reduced work engagement. Teachers are then likely to experience fatigue to a point that they are not concerned about the quality of the education they provide but merely having the work done without being passionate about it. Furthermore, this could lead to de-motivated teachers who do not experience satisfaction in the work that they provide. For example, some teachers feel that there is a limited choice of occupations and teaching was their

means of earning a salary to support themselves (in a way they feel stuck in the profession). From a pathogenic perspective, burnout and work engagement have become specific focus areas for research and intervention because of the impact that they can have on employees' daily work functioning (Maslach, Schaufeli, & Leiter, 2001). It is therefore important to investigate burnout and engagement in the teaching profession.

Against this background, this study focuses on teachers' burnout and work engagement and how job demands and resources in the school environment are related to these two constructs. In the sections that follow, a motivation for investigating these relationships in the teaching profession is given.

1.2 Problem Statement

Teachers often go into the teaching profession with an expectation of a hopeful future and the drive to provide a high standard education for the future benefit of the learners (Fourie & Deacon, 2015). However, the demands, pressures and conditions to which they are sometimes exposed can restrict their passion to teach and present difficulties in achieving their mission to make a difference (Fourie & Deacon, 2015). Many factors can lead to the development of stress, discouragement to teach, and early retirement of teachers. This seems more true for teachers in public schools, compared to their counterparts in private schools. Included in these factors are ill-disciplined and lethargic learners, a lack of support from the department of education or government (local and national), inadequate funding, pressure from unions, and lack of professional backing. In addition, there is lack of support from the community, poor image of the teaching profession, and uncertainty regarding teachers' responsibility (Fourie & Deacon, 2015; Gold & Roth, 1993; Jackson, Rothmann, & Van de Vijver, 2006; Sosibo & Nomlomo, 2014).

These factors may lead to discouragement and eventually even burnout (Mesthrie, 1999; Rothmann, 2003).

This study specifically focused on high schools. The South African Schools Act (No. 84 of 1996) identifies two broad categories of high schools, namely private/independent schools and public schools. Private schools tend to have more resources, whereas public schools depend on the state to provide resources (funding is determined by the school district/government) (Goldhaber, 1996; Ingersoll, Alsalam, Bobbitt, & Quinn, 1997; Jimenez, Lockheed, & Paqueo, 1991; Kolade, 2019; Miraj, Reba, & Din, 2018). Teachers are required to perform their organisational roles in public or private schools to achieve educational goals (usually indicated in lesson plans). These goals allow the organisation (in this case the school) to achieve the goals of teaching and learning. It is important to consider that teachers' experiences may vary and this often depends on the sector in which they teach.

In South Africa, a few challenging issues may have an impact on the well-being of teachers, particularly in public schools. For instance, there are reports that teachers felt that their salaries are unsatisfactory, considering the excessive workload; there is a lack of opportunities for career development; and the implementation of impractical policies (particularly in public schools (Kallaway, 2007; Maniram, 2007; Roper, 2007). The nature of work currently, in South Africa and worldwide, requires more from teachers than it did in the past. For example, curricula in the past used to be consistent, which allowed interventions to be implemented and allowing change to be noteworthy and effective. Moreover, constant changes introduced by the Department of Education increase the pressure under which teachers already operate. The continuous changes in education policies include Curriculum 2005 (C2005), which replaced the apartheid curriculum in 1998 in a bid to empower teachers and remediate past injustices through

an outcomes-based curriculum (Cross, Mungadi, & Rouhani, 2002; Krishna, 2014). Since this policy (C2005) was not clear and difficult to implement in schools, it was later replaced with the National Curriculum Statement (NCS). The NCS introduced Outcome-Based Education (OBE) in South Africa that aimed to simplify the outcome statements and place more focus on basic skills, subject matter expertise (Jackson, 2004), and grade progression. This new approach requires public school teachers to learn new curricula/policies constantly and does not allow for effective implementation of interventions that are meant to improve quality of learning for both the teacher and the learner (see Pillay, Goddard, & Wilss, 2005). Furthermore, this approach has become more learner-focused in that, in addition to meeting the demands of the OBE framework, teachers are also required to be able to adapt their teaching style to the unique needs of every student (Comrey & Lee, 1992; Ghitulescu, 2006; Krishna, 2014; Rooth, 2005). After OBE was implemented, Curriculum Assessment and Policy Statement (CAPS) (a revised design of the NCS) was introduced to replace OBE in order to improve South Africa's quality of education. CAPS was implemented in 2012 for Foundation Phase (grade R–3) and grade 10, in 2013 for Intermediate Phase (grade 4–9) and grade 11, and in 2014 for grade 12 (Krishna, 2014). Although the changes were intended to benefit teaching and learning, teachers now faced the challenge of meeting the demands of these curricula (Naidu, 2005). The employee and work relationship has also changed in a way that, instead of experiencing fulfilment in the work that is done, more focus is placed on the amount of work that needs to be covered (quality versus quantity) (Barling, 1999; Krishna, 2014).

Additionally, teachers in public schools often have to deal with overcrowded classes where learners sometimes have to share resources such as textbooks, resulting in disruptive behaviour in classes. As a result, teachers may suffer under the stressful conditions (Pretsch,

Flunger, Heckmann, & Schmitt, 2013). When faced with these kinds of challenges, a large number of teachers have become aggravated, discouraged, and less motivated to work. One would assume that this would have a negative impact on the quality of education provided and the learners' reception, thus initiating a vicious cycle. Therefore, in order for teachers to continue performing in their roles of nurturing learners' growth and development, it is imperative that teachers are well physically and mentally (Pillay et al., 2005). In private schools, the importance of having smaller classes is one of the most prevalent features. In other words, in private schools, the learner–educator ratio differs greatly from that of public schools. Moreover, due to better fee funding and fundraising, the lack of resources or the ability to control student behaviour does not affect teachers and learners as much. Also, because of parental support in private schools, private school teachers are able to deal with disruptive learners by removing them from the class or the school itself. As a result, discipline, good academic performance and a good general school environment are suitable for work and learning (Immelman & Roberts-Lombard, 2015).

All these challenges may influence teachers' work engagement and might even lead to burnout (Karp, 2007; Pretsch et al., 2013). However, there seems to be a lack of research investigating whether there are differences in the level of work engagement and burnout between public and private high school teachers, specifically in South Africa. This is a problem because the quality of education, to a certain extent, becomes affected by the compromised well-being of the teachers. For this reason, it is imperative to know and investigate the differences, because it seems that teachers in public schools are at a disadvantage, as they at times have to deal with socioeconomic problems before they are able to teach. Furthermore, their well-being is compromised by the lack of support from the government, which reduces the passion to teach. Their reduced passion will also then affect the future of the learners because meeting the

curriculum needs becomes more important. Therefore, if there is hope of improving the quality of teaching and reducing the number of teachers leaving the profession, more research must be done to provide recommendations and possible solutions to the problems identified in this study.

The abovementioned challenges indicate that teaching has some benefits but in this study, more challenges have been highlighted. One of the most important of these challenges is the dissonance between in the interaction of teachers with the learners (Van Horn, Schaufeli, & Enzmann, 1999). This becomes a risk factor because interaction with the learner is the sole purpose of teaching and if teachers experience stress as a result then this poses a problem. Bearing in mind the abovementioned risk factor, the Job Demands–Resources (JD-R) model assumes that risk factors associated with stress on the job are likely to be present in every type of job. In the JD-R model, all these factors can be seen as demands or resources. In short, what the JD-R theory suggests is that in one's job there are two broad categories that influence the well-being of individuals: job demands and job resources. The model also assumes that irrespective of the occupation, stress and burnout develop when some demands are high and when some resources are low (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). In other words, stress and burnout are a response to an imbalance that occurs between job demands and the availability of resources to buffer the demands (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Demerouti, et al., 2001). The model does not solely focus on negative outcomes but includes both negative and positive outcomes of well-being. From the perspective of the JD-R model, teachers in private schools might therefore be more engaged and be less likely to experience burnout than teachers in public schools. Due to the perception that demands would be higher in public schools, differences in work engagement and burnout levels would be expected among teachers in private and public high schools. To investigate the differences, the study aims to

highlight the job characteristics (i.e., job demands and resources) that are likely to have an effect or influence on the difference between the levels of teacher engagement and burnout. The study used the Job Demands–Resources Model to explain the relationship between job demands and work engagement/burnout and the relationship between job resources and work engagement/burnout. According to Schaufeli Taris (2014), the JD-R model is very popular and is considered one of the leading models of job stress. For this reason, the JD-R model was used because since it was developed 15 years ago by Demerouti, et al (2001) and it has been supported, reviewed, and criticized by other researchers (see Bakker, Van Emmerik, and Van Riet, 2008; Hakanen, Schaufeli, and Ahola, 2008; Schaufeli, 2017, Schaufeli and Bakker, 2004; Taris, Leisink, & Schaufeli, 2017). Because the model has evolved, it now has a wide range of job characteristics that allow for the model to be flexible enough to be tailored to the need of the study (Schaufeli, 2017). This indicates that it has evolved since it was developed thus making it relevant to this study as it can be applied across different countries and occupations including teachers (see Bakker, Demerouti, & Schaufeli, 2003; Bakker, Demerouti, de Boer, & Schaufeli, 2003; Schaufeli & Bakker, 2004; Hakanen, Bakker, & Schaufeli, 2006; Hu, Schaufeli, & Taris, 2011).

1.3 Aims and Objectives of the Study

It is against this background that this study aims to investigate the relationship between demands and resources and burnout and engagement among teachers in public and private schools. Using the JD-R, the study aims to gain a better understanding of how the availability or lack of job resources and job demands in private and public schools moderates work engagement and burnout. To answer the research aim, the following research questions are asked:

1) What is the relationship between work engagement and job resources?

2) What is the relationship between work engagement and job demands?
3) What is the relationship between burnout and job demands?
4) What is the relationship between burnout and job resources?
5) What is the difference in the work engagement levels between teachers in public and private schools?
6) What is the difference between burnout levels between teachers in public and private schools?
7) Does teaching in a private or public school moderate the relationship between job demands and burnout?
8) Does teaching in a private or public school moderate the relationship between job resources and engagement?

These questions hold important implications for theory and practice. For theory, these questions would prompt for more research to be conducted on the differences of teacher well-being in private and public schools. This could help the government and education department improve well-being and lead to uncompromised quality of education. Furthermore, these questions will make a contribution by highlighting the differences in the available resources and variable demands for teachers. In terms of practice, they may lead to consistency in the changes that occur in policies, so that teachers do not find themselves frustrated and experience burnout because they were not able to handle the challenges that come with these changes. An implementation of policy may need to be considered to ensure that the standard of education is maintained between private and public schools. There may need to be a change in policy in order to limit the number of teachers leaving the profession due to compromised well-being caused by the challenges faced in high schools. Therefore, this study is important because even though it

has replicated theory about well-being using the JD-R model, there is limited research that compares demands and resources in private and public schools. Although there are limitations to the study, the study contributes to the research on general well-being of teachers in South Africa. This research also has the potential to inspire new studies based on the implications and recommendations of this study.

1.4 Summary

In general, teachers often have to cope with a large number of demands and in most cases, with limited resources and lack of control. This chapter has presented an overview into the well-being of teachers in private and public schools and how there may be differences between their level of work engagement and burnout, based on their job resources and job demands.

1.5 Preview of Content of Chapters

Chapter 2 will provide an overview of work engagement theory, burnout theory, the Job Demands–Resources model, and theory on the nature of private and public schools (while highlighting the difference between the two).

Chapter 3 will contain an overview of the research methodology and analysis used in the study. A discussion of the participants, statistical techniques and ethical considerations will be provided.

An outline of the results from the data collected will appear in Chapter 4. The results will be given in line with the aims of the study.

In Chapter 5, a discussion of the results will be presented, as well as implications for theory, practice, and method. Recommendations for future research will also be given.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to provide a background of literature surrounding the following constructs that are important for the study: (a) the status of education in South Africa; (b) well-being at work, specifically work engagement and burnout; (c) the Job Demands–Resources (JD-R) Model; and (d) moderators affecting well-being being private and public schooling.

2.2 Contextualising the Status of Education in South Africa

According to the Department of Basic Education (June 2018), the latest statistics indicate that in 2016, there were about 29,749 recognised public and registered independent schools. The schools were distributed as follows: 14,795 primary schools with 6,929,834 learners and 203,139 teachers; 6,186 secondary schools, with 3,989,236 learners and 140,532 teachers; and 4,593 combined and intermediate schools with 2,013,465 learners and 74,942 teachers. To sum it up, the basic education system consists of 13,307,830 learners, who are taught by 440,151 teachers allocated to 29,749 educational institutions (Department of Education, 2018). According to Jackson, Rothmann, and van de Vijver (2006) and Modisaotsile (2012), even though the South African government is considered to have one of the highest rates of government expenditure in education, the quality of education remains questionable. These authors further report that a well-embedded education system is essential in creating a population that is well educated and maintaining an active economic and political system in the country (Jackson et al., 2006; Modisaotsile, 2012). Currently, there is little to less improvement of the education system in South Africa, even though the budget has doubled in the last five years (Modisaotsile, 2012). There are various signs that indicate that our education is in a crisis state (Modisaotsile, 2012; Sosibo & Lomlomo, 2014). For example, one of the factors that has an effect on education is

parental involvement; without this, it is difficult to discipline the learner or even improve scholastic performance if there is a concern. Other factors include poor exam results, a low standard of teaching, low performance, and overcrowded classes (Modisaotsile, 2012). With regard to overcrowded classes, the average ratio of learners to teachers is 30.4:1; this includes teachers that are remunerated by school governing bodies. Without these additional posts, the ratio would be 32.3:1 (Department of Basic Education, 2014). In general, public schools generally have more students in a class than those in independent schools (Department of Basic Education, 2014; Modisaotsile, 2012). Since education plays a crucial role in the development of the economy (Jackson et al., 2006), it is imperative that there is a regular evaluation of the concerns about the failing education system. Private schools, on the other hand, are known to experience fewer challenges than public schools. This is because they do not depend on the government for their resources. Before apartheid, private schools in South Africa were located in the centre of the city and based on both income and ability, the parents would decide which school their children would attend (Selod & Zenou, 2003). White families that could afford it remotely determined fees in private schools. In South African private schools, the governing body mostly consisted of White parents with the hope of controlling and sustaining their resources (Walton, Nel, Hugo, & Muller, 2009). Now, in the post-apartheid era, parents that can afford to do so, prefer to enrol their children in private schools with the hope of a better quality of education (Fiske & Ladd, 2004; Immelman & Robert-Lombard, 2015).

A study conducted by the Human Sciences Research Council (HSRC) found that teachers in general are frequently absent at school on Mondays and Fridays, usually because of illness (Reddy et al., 2010). According to Modisaotsile (2012), this might also be because there may not be consistent teacher development programmes. In February 2011, Angie Motshekga, the

Minister of Education, suggested that the reason that the education system is in crisis is because there are teachers that lack discipline and focus in this regard (Modisaotsile, 2012). According to Jackson et al. (2006), in order to help improve the conditions, the system needs driven and vigorous educators. Securing well-functioning teachers would ensure a better delivery of quality education (Kubberud, Helland, & Smith, 1999).

2.3 Well-being at Work

Well-being is defined as "an overall evaluation that an individual makes of his or her life in all its important aspects and is often called 'subjective well-being.'" According to Harter, Schmidt and Keyes (2002, p. 1), well-being is seen as "a broad category that encompasses a number of workplace factors". These factors, according to Fisher (2010), could include and are not limited to job satisfaction, job involvement, affective organisational commitment, work engagement, positive and negative emotions and moods at work, intrinsic motivation, thriving, and vigour. Similarly, Diener and Suh (1997) suggest that well-being constitutes three interdependent elements: life satisfaction, pleasant affect, and unpleasant affect. Affect refers to emotional states and attitudes, whereas life satisfaction refers to satisfaction with life, as it is perceived (Diener & Suh, 1997). The well-being of employees is to the great advantage of the community and organisations (Harter et al., 2002).

Well-being at work is an important subject that is critical to the functioning of the organisation. Because individuals spend a large amount of time at work, it is important to be aware of their experiences, whether emotional or social in nature. These experiences may have an effect on the individual and their work, as they often spill over in these domains. In most cases, work spills over into personal life and vice versa (De Simone, 2014). Furthermore, well-being could possibly have an impact on the individuals and the organisations in a negative way.

In other words, poor well-being would lead to individuals' being absent from work, making poor quality decisions, being unproductive and making poor overall contributions to the organisation (Price & Hooijberg, 1992).

For the purpose of this study, the dimensions of well-being discussed are work engagement and burnout.

2.3.1 Work Engagement

Various authors have defined work engagement differently. Firstly, Roberts and Davenport (2002) define it as a person's immersion in their job. People who are often highly engaged appear to uncover more personal identification to the job and their source of motivation becomes the work itself. Not only are these individuals hardworking but they are also productive and tend to produce desired results (Rothmann & Jordaan, 2006). Employees who are engaged in their work often experience a sense of individual achievement when their expertise and aptitude are applied in their work. Secondly, Khan (1990, p. 3) defines it as "the harnessing of organisation members' selves to their work roles [by which they] employ and express themselves physically, cognitively and emotionally during role performances". In this case, employees who are considered disengaged would be said to be disconnected from their jobs, thus suppressing their personal distinctiveness, opinion, and feelings when performing their roles (Rothmann & Jordaan, 2006). Lastly, Schaufeli, Salanova, González-Romá, and Bakker (2002, p. 74) refer to work engagement as a good, fulfilling, working-related condition of mind, defined by vigour, dedication, and absorption.

In the definition proposed by Schaufeli et al. (2002), there are three vital concepts that constitute work engagement (vigour, dedication, and absorption) and within these concepts are three distinct segments, being the physical, emotional, and cognitive aspects. Firstly, according

to Schaufeli et al. (2002), *vigour* is related to the *physical* aspect, and is regarded to as high levels of energy that comes with mental reliance when a work-related task is done. In addition, Schaufeli and Bakker (2003) mention that vigour is also related to the level of willingness that is invested in the effort one makes towards their work and the ability to be persistent even when faced with difficulties. Secondly, Bakker, Schaufeli, Leiter, and Taris (2008) and Schaufeli and Bakker (2003) indicate that *dedication* is related to the *emotional* aspect and is illustrated by the individual's ability to be fully involved in his or her work. This enables individuals to experience meaning in their work, endure challenges, and experience immense enthusiasm and pride towards their work. Lastly, Schaufeli et al. (2002, p. 75) define *absorption* as being intensely immersed in one's work, and Schaufeli and Bakker (2003) report that it is related to the *cognitive* aspect. Bakker et al. (2008, p. 188) provide a more comprehensive definition of absorption as the capacity to focus completely and to be captivated by one's job to the point where time becomes insignificant and it becomes more difficult to move away or detach from one's job.

Individuals that are engaged are considered to have high energy levels and they show dedication to their work. In most cases, these individuals approach their work in a manner that allows them to deal effectively with demands and stressors that come with their jobs (Bakker et al., 2008; Jackson & Rothmann, 2005. When employees are engaged in their work, they tend to experience a better in-role fit that boosts their job performance and performance outcomes for their organisations (Bakker, Demerouti, & Verbeke, 2004; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Various studies report that work engagement usually presents positive work outcomes such as organisational commitment, job satisfaction, and work performance, to name a few (Bakker & Demerouti, 2008; Field & Buitendach, 2011).

Work engagement among teachers has received limited attention. Research has revealed that work engagement is evoked by progressive outcomes produced in individual and organisational levels (Bakker, et al. 2007). For instance, a weekly diary study conducted among 54 teachers found that day-to-day degrees of work engagement are predicted by performance in the classroom. In this case, the teachers would perform confidently and progressively in the classroom if they were engaged in their work (Bakker and Bal, 2006). Furthermore, Hakanen, Bakker, and Schaufeli (2006) found that work engagement gives an indication of the teacher's commitment to the school/organisation. It is also evident that engaged employees are able to live their lives outside of work as they still socialise and participate (Hakanen et al., 2006). In other words, engaged employees are able to work long hours and work hard but there is no underlying obsession to the point of becoming workaholics (Schaufeli, Taris, et al., 2001).

2.3.2 Burnout

Maslach (1982) regards burnout as "a state of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among people who do 'people work' of some kind". Schaufeli and Enzmann define it as

> a persistent, negative, work-related state of mind (or syndrome) developing over time in so-called 'normal' individuals, characterised by an array of physical, psychological and attitudinal symptoms, primarily exhaustion, and accompanied by distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional personal and societal attitudes and behaviours at work. (1998, p. 36)

However, burnout tends to develop gradually and by the time the individual notices the symptoms, his or her burnout would be at an advanced stage (Maslach & Schaufeli, 1993). According to Schaufeli and Enzmann (1998), there are three important components in burnout,

being *emotional exhaustion, mental distance* (depersonalisation and/or cynicism) and *reduced professional efficacy*. Firstly, exhaustion occurs when emotional resources are drained or exhausted and when individuals feel that they have exceeded their limits. Secondly, mental distance occurs when an individual starts being negative towards to his or her work or colleagues. Lastly, professional efficacy occurs when an individual feels content, productive and experiences a sense of achievement in his or her work environment.

Maslach and Schaufeli (1993) claim that burnout can be seen as extended job stress, where job demands are seen to exceed an individual's resources. Jackson and Rothman (2005) also ascertain that burnout may be a result of prolonged stress that is related to an unhealthy work environment. According to Levert, Lucas, and Ortlepp (2000), burnout is a consequence of an individual's inability to manage stressors in his or her work environment. The difference between stress and burnout is that stress is believed to be an adaption process associated with mental and physical symptoms. Conversely, burnout is considered as the collapse in the adaption process that is related to chronic malfunctioning (Brill, 1984). Before burnout was considered an academic construct, it was first seen as a social problem. In other words, burnout was a practical concern rather than an academic one (Maslach & Schaufeli, 1993). In recent years, research on burnout appears to be moving towards its inverse: work engagement. Lately, interest has been extended to the positive aspects of employee well-being, rather than placing focus on the negative aspect. In this case, burnout is thought as a disintegration of engagement with the job. This discovery shows a developing pattern towards *positive psychology*, of which the essence is human qualities and optimal functioning, as opposed to shortcomings and deficiency (Seligman & Csikszentmihalyi, 2000).

Burnout has been recognised as a threat in so-called *helping* professions, and problematic especially in the teaching profession (Buunk,& Schaufeli, 1993; Mesthrie, 1999; Van Dierendonck, Schaufeli, & Buunk, 1993). Most researchers concur that teachers who experience burnout usually display high levels of fatigue and often show a negative attitude towards their work (cynicism). These are central dimensions included in burnout (Maslach, Jackson, & Leiter, 1996; Maslach, Schaufeli & Leiter, 2001; Schaufeli & Enzmann, 1998). The teaching profession is losing a rich pool of creative and talented individuals because of burnout. Initially, these individuals were enthusiastic and were excited about teaching, but burnout had gradually developed throughout their career progression (Jackson, 2004). Teachers experience burnout because of the prolonged stress and anxiety associated with impractical time demands, weak relationships, a larger number of learners, lack of resources, role ambiguity, lack of support from the organisation, and not having a say in learner behavioural issues (Byrne, 1994; Friedman, 1995). Because of this, the classroom climate changes and teachers develop negative attitudes towards their work and the learners.

2.4 Job Demands and Resources (JD-R) Model

In light of this study, it is essential that it is understood what a particular job entails and what that means for high school teachers. Berg, Dutton, and Wrzesniewski (2008) mention that the composition of a job is a set or compilation of responsibilities and interactions that allow successful performance. Similarly, a job is described as an array of roles and duties that are meant to be carried out by an individual employee for an employer, with the purpose of being remunerated in return (Coetzee and Schreuder, 2014). For the purpose of this study, an essential part of being a high school teacher is to encourage and be a facilitator of student learning. This is achieved through thorough lesson planning according to the standards laid by the Department of

Basic Education and Training (DBE), which holds the responsibility of primary and secondary education in South Africa (Sosibo & Lomlomo, 2014).

In an attempt to understand the effects of job demands and job resources on individuals in the workplace, Demerouti, Bakker, Nachreiner, and Schaufeli (2000) suggested the JD-R model. The JD-R model was introduced as an alternative to the already existing models of well-being, such as the demand–control model and the effort–reward imbalance model. The aim was to allow for a model that would be relevant for all job types without limited variable in the model. The alternative model included a wide range of variables such as working conditions, by analysing employees and the organisation in its entirety. The role of the model is to include both negative and positive indicators, as well as the outcomes of well-being (Demerouti et al. 2000). According to Demerouti et al. (2000), the central assumption of the JD-R Model was that although every job and organisation may possess identifiable work characteristics related to well-being, the characteristics could be separated into two broad categories: job demands and job resources. Demerouti et al. (2000) refer to *job demands* as "physical, social, or organisational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological stress (e.g. exhaustion)." In other words, job demands are aspects of the job that potentially evoke tension if they exceed an individual's limit in their capacity to adapt (Bakker et al., 2007). Another component of the model, *job resources,* refers to "physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals, (b) reduce job demands, (c) stimulate personal growth and development." The basic theory behind the JD-R Model is that job strain occurs when there is no balance between job demands and job resources (job demands exceed job resources). This usually happens when an individual view his or her job demands as

exceeding the resources available. On the other hand, an individual will have experiences that are more positive if they perceive that they have more job resources (Jackson, et al., 2006; Schaufeli and Bakker, 2004). In more recent studies, personal resources were integrated into the model because, when the model was developed, only characteristics of the work environment were considered (Schaufeli & Taris, 2014). This is important to highlight because psychological approaches assume that human behaviour is influenced by the relationship between personal and environmental factors (Schaufeli & Taris, 2014; Taris et al. 2017). Personal resources are defined as "the psychological characteristics or aspects of the self that are generally associated with resiliency and that refer to the ability to control and impact one's environment successfully" (Schaufeli & Taris, 2014, p. 49). Comparable with job resources, personal resources aid in achieving work goals, encourage personal growth and development (Taris, et al. 2017). However, in this study personal resources were not incorporated as they were not in the inception of this study.

Initially, the Job Demands–Resources model supposes that well-being is driven by two hidden mental states: a negatively-driven process where there are more demands from a job and fewer resources that intensify exhaustion, and a positively-driven process where job resources lead to their work engagement (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Hu, Schaufeli, & Taris, 2017; Schaufeli and Bakker, 2004). For example, due to job demands such as role ambiguity, pressure to complete work in time, and workload, individuals tend to succumb to negative responses such as stress or burnout (Hakanen, Bakker, & Schaufeli, 2006; Lee & Ashford, 1996). Stable exposure to high demands, for instance, can also lead to ill health, as this would entail a constant depletion of one's energy resources, thus rising levels of mental stress (Hu, Schaufeli, & Taris, 2017). Likewise, a scenario with stable low demands means that there

are few incentives in the work environment, which can frustrate the need for challenge and minimize the prospects of learning and development of employees. It, in effect, can negatively affect the emotional energy level of a worker (Hu, Schaufeli, & Taris, 2017). In this sense, there is a positive relationship between stress/burnout and job demands (Demerouti, Bakker, De Jonge, et al., 2001). If individuals perceive that they are rewarded then there is a positive relationship between job resources and work engagement (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Being constantly exposed to high job resources could indicate an association with an increased level of work engagement, meaning the resources' motivational capacity will activate, sustain and improve people's psychological capacity (Hu, Schaufeli, & Taris, 2017; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008).

Consequently, with available job resources, individuals have a better chance of combating challenging job demands (Bakker & Demerouti, 2007; Tims, Bakker, Derks, & Van Rhenen, 2013). However, it is important to consider that job demands may sometimes measure features of the work that are a challenge rather than features of the work that cause stress (Steenland, Johnson, & Nowlin, 1997). Thus, this necessitates a differentiation between *challenging* job demands and *hindrance* job demands. According to Crawford, LePine, and Rich (2010), as well as Bakker, Rodríguez-Muñoz, and Vergel (2015), challenging job demands allude to those parts of a job that can possibly lead to improving one's skillset and better future prospects for the individual (e.g., adding activities to one's job, being included in new activities, or figuring out how to do new things). In contrast, Bakker, et al., (2015) state that hindrance job demands are those stifling parts of the job that reduce development and generally affect the individual negatively (e.g., conflict in roles or role uncertainty). Bakker and Demerouti (2011)

further state that challenging job demands have appeared to increase the positive effect that job resources has on work engagement.

In light of the JD-R Model, resources may be found in various levels, for instance organisational level (e.g., remuneration, advancement opportunities, and job surety); relational and societal interactions (e.g., supervisor and co-worker collaboration, team environment); how work is organised (e.g., role clarity, participation in decision-making); and task level (e.g., performance feedback, skill variety task significance, task identity, autonomy) (Joubert & Rothmann, 2007). In addition, job resources can either be intrinsic (personal resources such as optimism) or extrinsic motivators. Job resources are important tools for teachers when dealing with job demands that come with their profession, as well as being part of their rights to have the right tools to be able to execute and work towards attaining their goals (Hakenen et al., 2006). Ololube (2006) is of the view that motivation and engagement at work is encouraged by psychological rewards that are inclusive of work that is evocative and diverse, task independence, involved decision-making, constructive performance feedback, support structures, a sensible workload, satisfactory resources, salary, and learning and development opportunities.

Job resources play a fundamental intrinsic role that motivates a teacher's potential to learn and develop (Taris, Leisink, & Schaufeli, 2017). Furthermore, it is predicted that the availability of resources will essentially have an impact on the capacity to motivate for change. Ultimately, individuals that have the resources available in their workplace would be able to help eradicate the increasing levels of burnout (Van Dierendonck, Schaufeli, & Buunk, 1993). Job resources perform an extrinsic part of the motivation for teachers to achieve work-related goals. Job resources entail the following items in the physical work environment where teaching happens: a social support system, coaching from the supervisor, and performance review

feedback sessions. Job resources are mostly important in cases when there is a high job demand, and have a potential of serving as a buffer in reducing the strain caused by job demands (Bakker & Demerouti, 2014; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001)

2.5 Moderators Affecting Work Engagement and Burnout

2.5.1 Public Schooling

In the last 20 years, there have been major institutional changes in the public educational system. In the last few years of apartheid, most White schools were still given the right to decide on teacher appointments, admission policies, and enforcement of school fees. With the transition to Model-C schools, the main effect was the introduction of semi-privatisation of the White public education system (Selod & Zenou, 2003). The main aim of the Model-C schools was to preserve the White public schooling system in the rise of racial integration that was being promoted post-apartheid. Since the time of the democratic era in South Africa, the South African Schools Act (No. 84 of 1996) has identified two broad categories of high schools, namely public schools and private/independent schools, that enrol learners from grades 0 to 12 (DoE, 1997; Immelman & Roberts-Lombard, 2015). Each government-funded school is a juristic person, with legitimate ability to perform its capacities regarding the Schools Act (Department of Education, 1996). Public schools are controlled by the state and can be either “fee paying” where they can charge school fees or “non-fee paying” where they may need to rely solely on the state and have income through fund-raising initiatives. Every province has the responsibility to ensure that they have enough resources to run adequately. Accordingly, standards are immensely different, depending on the effectiveness and wealth of the province. The location of public schools can be in townships, urban, semi-urban, or rural areas (Bisschoff & Mestry, 2009).

There are a number of challenges faced by teachers working in many public schools, specifically in rural areas in South Africa. The challenges include the scarcity of clean water and good sanitation, lack of basic infrastructure, overcrowded classrooms, an absence of educator supporting structures, and a lack of involvement and commitment to learners' education from parents (Bloch, 2010; Davids & Makwabe, 2007; Karp, 2007; Mohlala, 2010; Panday & Arends, 2008). With that said, Cohen, McCabe, Michelli & Pickeral (2009) confirms that teachers in many rural schools indeed work under more challenging conditions compared to teachers working in urban areas, including those in independent schools. For the most part, with lack of funding and support from the government, many learners perform below grade because of low quality education and untrained teachers. Other learners also perform below grade because of the lack of resources in class. It is because of this that parents who can afford it, enrol their children at private schools. However, those that cannot afford it have no option but to depend on the government for their resources (Epple & Romano, 1998).

2.5.2 Private Schooling

Private/independent schooling includes all schools in South Africa that do not form part of public education (Gauteng Provincial Legislature, 1995, p. 9). These would be somewhat funded, managed, owned, and given financing by stakeholders other than the government (Kitaev, 1999; Walton et al., 2009). Many of these schools are part of an association that is the Independent Schools Association of Southern Africa (ISASA), a non-profit organisation considered the most inclusive independent (private school) association in Southern Africa. According to ISASA, people who have established the educational institution at their own expense, govern independent schools privately (ISASA, 2005). However, in terms of South Africa's Constitution, these institutions should be registered with the state and they are not to

discriminate based on race. The standard of education provided by these institutions should be not be below that of public education (Republic of South Africa (RSA), 1996a). One of the biggest differences between private schools and public schools is the curriculum. Most private schools use the Cambridge curriculum and their examinations are governed by the Independent Examinations Board (IEB) (Selod & Zenou, 2003). Some private schools do not charge high fees and receive a grant from the government depending on the community they serve and the fees they charge (Fiske & Ladd, 2004). Other differentiators of private schools are the better facilities and resources, which are made possible by the fees charged (Selod & Zenou, 2003). Also, most private schools boast smaller class sizes—about 15 learners to one teacher and one assistant, which parents prefer for their children (Immelman & Robert-Lombard, 2015).. Private schools can offer a wider range of extra-mural activities and most of the time these will come at an extra cost (Immelman & Robert-Lombard, 2015).

Based on the above, the present study will explore how public and private schools moderate the relationship between job demands–resources and work engagement and burnout.

CHAPTER 3: RESEARCH METHOD

3.1. Introduction

In this chapter, an outline is provided of the research design and method used in the study. A research design is regarded to as a tactical strategy to be used in a research project to give relevance and validation of the research findings (Bergh, 2009; Terre Blanche, Durrheim, & Painter, 2009). This section specifically includes the research approach and design, research participants and sampling, the research procedures followed, the measuring instruments used, and the statistical analyses performed on the data. In conclusion, a brief discussion of the ethical considerations is provided.

3.2. Research Approach and Design

This study used a quantitative research method and a cross-sectional research design. Quantitative research makes use of numerical/statistical/mathematical methods of analysing collected data (Marshall, 1996). It is thought to reduce subjectivity in research (Matveev, 2002). A cross-sectional research design is when a study is done at one point in time, allowing for the study of multiple outcomes (Mann, 2003). Cross-sectional designs often apply a survey approach, whereby questionnaires are administered to participants (Mann, 2003). Although a cross-sectional research design and survey research are time and cost effective it cannot differentiate cause and effect from a sequence of events (Mann, 2003).

3.3. Research Participants and Sampling

This study used non-probability convenience sampling method, enabling a lot of information to be collected quickly and easily. The sampling method allowed the researcher to be able to approach participants that were conveniently available to complete the surveys

(Zikmund, 2003). In this study, the target was a representation of the South African population. Thus, it was important to have a representative sample that ideally indicated demographics that exist in the South African population to enhance generalisation of results (Zikmund, 2003).

A total of *n* = 393 questionnaires were collected from educators in both private (*n* = 189, 48.1%) and public schools (*n* = 204, 51.9%) in the Gauteng province of South Africa. The criteria for eligible participation were the following: (a) the participant should possess necessary qualification for teaching, (b) have at least a year's experience in teaching, and (c) need to be proficient in English. This was to ensure that the participants were qualified teachers with teaching experience and who could complete the questionnaires. As the study aimed to explore private and public schools, more or less equal data was gathered from private (48.1%) and public (51.9%) schools.

In Table 3.1 the sample demographics of participants are provided. Inspection of Table 1 shows that 22.6% (*n* = 89) of the sample were men, while 77.1% (*n* = 304) of the sample were women. In terms of marital status, the majority of the sample (*n* = 208, 52.8%) were married/living with their partner, 16.8% (*n* = 66) of the sample were single, and 15% (*n* = 59) of the sample were divorced. With regards to the sample's ethnicity, the majority of the group was African, represented by 39.9% (*n* = 157), followed by White at 30.8% (*n* = 121), and Coloured at 14.2% (*n* = 56). The majority of the sample were English speaking (*n* = 148, 37.7%), followed by 21.6% (*n* = 85) Afrikaans-speaking individuals, while 13.7% (*n* = 54) of the sample spoke isiZulu. The majority of the sample (51.9%, *n* = 204) possessed an educational qualification at a Bachelor's/BTech/Diploma level. Almost all the participants (*n* = 376, 95.7%) were employed full-time. Most participants usually travelled more or less 30 minutes to and from work (*n* = 262, 66.7%). The age groups represented in the sample ranged between 25 or younger and 65 (with

one participant older than 65), where the majority of the sample ranged between 46 and 65 years of age (*n* = 249, 63.2%). The majority of the sample had worked in their organisation for 11 or more years (*n* = 219, 55.7%) followed by 22.9% (*n* = 90) of the sample who had been working in their current organisation between 3–5 years. A large number of the sample had been working in their current position for 11 or more years (*n* = 199, 50.6%). A majority of the sample had 41 or more learners in the class (*n* = 169, 43%) followed by 40.5 % (*n* = 159) of the sample having between 11–20 learners in the class.

Table 3.1
Demographical and Biographical Characteristics of Participants

	Total		Public		Private	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender						
Man	85	22.6	33	16.2	56	29.6
Woman	299	77.4	171	83.8	133	70.4
Marital Status						
Single	64	16.8	25	12.3	41	21.7
Married/ Living with Partner	204	52.9	101	49.5	107	56.6
Divorced	57	15.0	42	20.6	17	9.0
Widow/ Widower	18	4.8	11	5.4	8	4.2
Remarried	8	2.0	2	1.0	6	3.2
Separated	33	8.4	23	11.3	10	5.3
Ethnicity						
African	153	39.9	147	72.1	10	5.3
Coloured	116	30.8	24	11.8	97	51.3
Indian	56	14.2	31	15.2	25	13.2
White	35	8.9	2	1.0	33	17.5
Other	24	6.1			24	12.7
Home Language						
English	146	37.3	17	8.3	131	69.3
Afrikaans	83	21.4	40	19.6	45	23.8
Sepedi	34	8.9	33	16.2	2	1.1
IsiNdebele	21	5.3	20	9.8	1	0.5
Tshivenda	1	0.3			1	0.5

IsiZulu	54	13.7	52	25.5	2	1.1
Sesotho	17	4.3	15	7.4	2	1.1
Setswana	8	2.0	7	3.4	1	0.5
IsiXhosa	7	1.8	7	3.4		
Xitsonga	10	2.5	10	4.9		
SiSwati	3	0.8	2	1.0	1	0.5
Other	4	1.0	1	0.5	3	1.6
Education						
Grade 12	3	1.0	3	1.5	1	0.5
Bachelors/ B.Tech/ Diploma	200	51.9	176	86.3	28	14.8
Honours/ Postgraduate	127	32.8	21	10.3	108	57.1
Master's Degree	54	14.2	4	2.0	52	27.5
Contract						
Full-time	368	95.7	199	97.5	177	93.7
Part-time	16	4.3	5	2.5	12	6.3
Travel Time						
30 min	256	66.7	127	62.3	135	71.4
1hr	121	31.0	73	35.8	49	25.9
1hr 30 min	9	2.3	4	2.0	5	2.6
Sector						
Private School	185	48.1				
Public School	199	51.9				
Age						
25 years or younger	23	5.9	10	4.9	13	6.9
26 – 35	27	6.9	6	2.9	21	11.1
36 – 45	91	23.7	27	13.2	66	34.9
46 – 55	122	31.6	67	32.8	57	30.2
56 – 65	121	31.8	94	46.1	31	16.4
65 or more years	1	0.3			1	0.5
Current Organisation						
Less than 1 year	18	4.6	6	2.9	12	6.3
1 – 2 years	22	5.6	6	2.9	16	8.5
3 – 5 years	88	22.9	12	5.9	78	41.3
6 – 10 years	42	11.2	20	9.8	24	12.7
11 or more years	214	55.7	160	78.4	59	31.2

Current Position						
Less than 1 year	11	2.8	5	2.5	6	3.2
1 – 2 years	30	7.6	4	2.0	26	13.8
3 – 5 years	91	23.4	8	3.9	84	44.4
6 – 10 years	58	15.5	27	13.2	34	18.0
11 or more years	194	50.6	160	78.4	39	20.6
No. of Learners						
Up to 10 learners	5	1.3	1	0.5	4	2.1
11 – 20 learners	159	40.5	2	1.0	157	83.1
21 – 30 learners	25	7.1	7	3.4	21	11.1
31 – 40 learners	31	8.1	26	12.7	6	3.2
41 or more learners	164	43.0	168	82.4	1	0.5

3.4. Research Procedure

Permission to access the educational institutions was obtained from the Gauteng Department of Education. Thereafter, various schools were contacted via phone, email, and a contact person to participate in the research. During this process, in the initial contact, the purpose of the study was explained to the principals and heads of departments first, then filtered through to the teachers. It was made clear that participation was voluntary and the questionnaires were physically distributed to the schools. In the preface of each questionnaire, the contact details of the researchers were presented in the event that participants wished to make inquiries or obtain a summary of the results. The participants completed the questionnaire during school times and the questionnaires were collected at the end of the day. If this was not the case, the researcher was notified when the questionnaires were completed and collected.

3.5. Measurement Instruments

3.5.1. Biographical Questionnaire

A biographical questionnaire was used to collect relevant biographical information (summarised in Table 1).

3.5.2. The Utrecht Work Engagement Scale (UWES – 9 items)

The Utrecht Work Engagement Scale (UWES) was used to asses/measure the teachers' level of work engagement. Schaufeli and Bakker (2004) developed this scale. For the purpose of this study, the UWES-9 was used because it is shorter (has nine items). Responses from participants are measured on a 7-point frequency scale ranging from 0 (*never*) to 6 (*always*) and the ratings are based on what participants felt described them best. The UWES-9 measures three dimensions of work engagement: vigour, dedication, and absorption (Schaufeli, Bakker & Salanova, 2006). Examples of item statements include "When I get up in the morning, I feel like going to work" (vigour), "I am enthusiastic about my job" (dedication), and "Time flies when I'm working" (absorption). According to Schaufeli and Bakker (2003), the three-factor model is more suitable and fits well with different samples of data. However, de Bruin and Henn (2013) showed that subscale interpretation is not warranted because most of the item variance is explained by a dominant general factor[1]. A single total score (i.e., unidimensional engagement dimension) was therefore used in this study. Satisfactory reliability and structural validity have been found for the UWES in South Africa (de Bruin & Henn, 2013). The reliabilities of the scale that was used by de Bruin and Henn (2013) varied between .85 and .92 with a median of .92.

[1] An exploratory bifactor model with a Schmid-Leiman transformation was fit to the data collected in this study and the general factor was found to account for 86% of the variance.

This was seen as satisfactory. Reliability coefficients for the scale scores in this study are presented in section 4.3.

3.5.3. The Oldenburg Burnout Inventory

The Oldenburg Burnout Inventory (OLBI) was constructed and validated between different professional groups in Germany (Demerouti & Nachreiner, 1998). The Oldenburg Burnout Inventory (Demerouti, Bakker, Vardakou, & Kantas, 2003) is an instrument proposed alternatively to the widely-used Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986). The scale has two core dimensions of burnout that are measured: exhaustion and disengagement (from work). The scale contains 16 items in total and is scored on a 4-point frequency scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). The exhaustion sub-scale consists of eight generic items that refer to universal feelings of desolation, being strained from work, a need to rest, and feelings of physical exhaustion. Examples of item statements, which are considered as reverse items, include "After my work, I regularly feel worn out and weary" and "After my work, I regularly feel totally fit for my leisure activities" (Demerouti & Bakker, 2008). Disengagement indicates that one distances themselves from their work and their work content and shows negative, cynical attitudes and behaviours toward their work. The disengagement subscale consists of eight items; for example, "I frequently talk about my work in a negative way" and "I get more and more engaged in my work". For both scales there are four items worded negatively and four items worded positively (Demerouti & Bakker, 2008). Items were reverse scored as necessary in this study. Demerouti and Bakker (2008) found that the reliability for both OLBI dimensions was .85. The item functioning of the OLBI was examined in this study using exploratory factor analysis. It was found that items 9, 13, and 15 were problematic having a negative factor loading or factor loading close to 0 (even with reverse scoring of items)

in one or both school groups. These items were therefore removed in this study and a single total burnout score calculated using the items from both scales

3.5.4. Job Demands–Resources Scale

Jackson and Rothmann (2005) developed the Job Demands–Resources Scale (JDRS) with the aim of measuring job demands and resources specifically for teachers. The study was conducted on secondary school teachers from the North West province, making the scale relevant to the South African population. The JDRS consists of a total of 42 items. Responses of the participants was measured on a 4-point scale that ranged from 1 (*never*) to 4 (*always*). The JDRS included the following dimensions: (a) speed and workload, (b) psychological cost, (c) emotional load, (d) diversity in work, (e) opportunities for knowledge acquisition, (f) freedom at work, (g) interactions with co-workers, (h) relationship with supervisor, (i) role ambiguity, (j) material, (k) networks, (l) involvement, (m) contact potential outcomes, (n) unstable future prospects, (o) rewards, and (p) career advancement opportunities. Jackson and Rothmann (2005) found that the dimensions of the JDRS consisted of seven reliable factors, namely organisational support (α = 0.88), advancement opportunities (α = 0.80), overload (α= 0.75), job insecurity (α = 0.90), relationship with colleagues (α = 0.76), control (α = 0.71), and rewards (α = 0.78). Examples of the items of the scales include “Do you have too much work to do?” or “Do you have to give continuous attention to your work?” In this study, the overload scale was used to refer to job demands.

Researchers often use different demands or resources to form a latent variable in structural equation modelling (Bakker, Demerouti, Taris, Schaufeli, and Schreurs,2003; Hu, Schaufeli, & Taris, 2011). To obtain a Rewards score in this study a principal components analysis was conducted using the scale scores of growth, control, relationships, and support

extracting one component. Component scores were then obtained for this component and used for further analysis. Principal components analysis was preferred to exploratory factor analysis because of factor score indeterminacy (Grice, 2001). This component score had a Pearson correlation coefficient of .98 with the summated raw scores of the four aforementioned scales.

3.6. Statistical Analysis

Statistical analyses for this study were performed using the Statistical Package for the Social Sciences (Version 25, IBM Corp, 2019), *R* version 3.6.0 (R Core Team, 2019), and the Process Macro (Version 3.1, Hayes, 2018) in SPSS.

3.6.1 Reliability

Reliability of the scale scores were investigated using Cronbach's alpha coefficient (Cronbach, 1951) and McDonald's coefficient omega total (McDonald, 1999). Confidence intervals for these coefficients were calculated using bias-corrected and accelerated bootstrapping with 5000 resamples. Bias-corrected and accelerated bootstrapping (BCA) creates the sampling distribution of the test statistic through resampling and makes it possible to estimate the sampling distribution of almost any variable using random sampling methods (Varian, 2005). BCA adjusts for both bias and skewness in the sampling distribution. This method is precise in a broad range of environments, has sensible demands for computing and generates small confidence intervals (Efron, 1987; Efron & Tibshirani, 1994). All calculations were done in the MBESS (version 4.5.1, Kelley, 2019) package in R (version 3.6.0, R Core Team, 2019).

3.6.2 Correlation coefficients

Correlation coefficients were investigated using Pearson's correlation coefficient and Spaerman's rank-order correlation. When analysing all the data, bootstrapping was used to

obtain confidence intervals for the correlation coefficients because the data were not normally distributed. Statistical significance was determined using the bootstrapped confidence intervals where a result was considered statistically significant at $\alpha = .05$ when the 95% confidence interval did not include 0 (Minitab Blog Editor, 2015). The *wBoot* package (Version 1.0.3, Weiss, 2016) was used to obtain these confidence intervals. BCA confidence intervals were obtained with 5000 resamples in all analyses.

3.6.3 Mean score differences

Mean score differences were investigated using welch-corrected *t*-tests. BCA confidence intervals for Cohen *d* effect sizes were obtained using the *bootES* package (version 1.2, Gerlanc & Kirby, 2015) and used to investigate statistical significance of the mean score differences.

3.6.4 Regression

Multiple regression was used to investigate moderation effect of school on the relationship between engagement/burnout and demands/resources while controlling for resources/demands. None of the variables were centred when constructing the interaction term. The analysis was conducted using the *process* macro (Version 3.1, Hayes, 2018) in SPSS (Version 25, IBM Corp, 2019). To assist with determining statistical significance 95% percentile bootstrapped confidence intervals were calculated using 5000 resamples. Simple slopes analysis was conducted for statistically significant interaction effects using the 16th, 50th, and 84th percentiles as the conditioning values (Hayes, 2018)

3.7. Ethical Considerations

Before the participation in the study commenced, the participant was informed of the purpose of the study. After explaining the purpose of the study, the researcher explained that

participation was voluntary and that participants had the right to withdraw at any point with no adverse effects. To ensure their anonymity, no identifying information was required in completing the questionnaire. Due to the fact that the researcher captured the data, their responses were kept private and confidential. The captured data was stored on a password-protected laptop accessible only to the researcher. The data was then analysed by a data analyst and to the best of the researcher's knowledge, no data was manipulated to suit desired results. As the researcher was conducting research at secondary schools, official permission was obtained from the appropriate authorities, including the Gauteng Department of Education (GDE) and the Johannesburg Central District office. Prior to the participation, informed consent was obtained. Ethical clearance for this study was granted by the ethics committee of the University of Johannesburg.

3.8. Chapter Conclusion

An overview of the research design and method conducted in the study was provided in this chapter. An elaboration on the measurement instruments and the statistical analysis techniques used was also provided. The next chapter will provide a description of the results obtained from all statistical analyses.

CHAPTER 4: RESULTS

4.1. Introduction

The succeeding chapter gives a representation of the results from the conducted statistical analyses. The following results are presented: descriptive statistics, scale score reliability, correlation coefficients, *t*-test analysis and moderated multiple regression analysis.

4.2. Descriptive Statistics

A summary of the descriptive statistics of the scale scores used in the study are presented in Table 4.1. This table includes the mean, standard deviation, skewness, excess kurtosis and standard error of the mean. When inspecting the means for the combined sample group, the mean score for Resources was 0 (because these are standardised scores) and the mean scores for Engagement, Burnout and Demands were between 2.40 and 3.79. Skewness coefficients were close to 0 for all the scales in the combined sample group but none of the excess kurtosis coefficients were close to 0. Inspection of histograms (see Appendix A) for the scale scores showed clear bimodal distributions for Engagement, Burnout, and Demands. The scale score distributions for each group across all the variables were mostly non-normal.

Table 4.1

Descriptive Statistics for the Combined Sample and the Public and Private School Sample Groups

	Mean	Median	SD	Skew.	Kurt.	SE
Combined Sample Group						
Engagement	3.79	4.00	.89	.15	-1.20	.05
Burnout	2.43	2.31	.56	.04	-1.41	.03
Demands	3.13	3.29	.55	-.08	-1.52	.03
Resources	.00	-.08	1.00	.11	1.93	.05
Private Schools Sample Group						
Engagement	4.38	4.22	.44	.36	-.56	.03
Burnout	1.97	1.92	.26	.71	1.21	.02
Demands	2.72	2.57	.41	1.62	1.77	.03
Resources	.46	.44	.79	-.22	.37	.06
Public Schools Sample Group						
Engagement	3.24	2.89	.85	1.64	1.49	.06
Burnout	2.86	2.92	.38	-1.51	2.63	.03
Demands	3.51	3.57	.35	-1.60	3.47	.02
Resources	-.43	-0.43	0.99	0.78	5.31	.07

4.3 Reliability

Reliability measures the consistency of the scales used in the study. Coefficient alpha and coefficient omega total are provided in Table 4.2. The results show that both coefficient alpha and coefficient omega were satisfactory for research purposes.

Table 4.2

Coefficient Alpha and Omega Total for the Scale Scores

	Combined		Private		Public	
	α	ω	α	ω	α	ω
Engagement	.93 (.92, .94)	.95 (.94, .96)	.82 (.78, .85)	.82 (.78, .85)	.93 (.91, .95)	.95 (.93, .96)
Burnout	.93 (.92, .93)	.94 (.93, .94)	.74 (.67, .80)	.72 (.62, .80)	.85 (.80, .89)	.87 (.82, .90)
Demands	.87 (.86, .88)	.90 (.88, .91)	.83 (.78, .86)	.85 (.74, .90)	.69 (.58, .78)	.70 (.58, .78)
Resources	.83 (.79, .86)	.62 (.37, .86)	.78 (.72, .82)	.78 (.56, .85)	.85 (.79, .89)	.66 (.41, .89)

Note. 95% confidence intervals in parentheses.

4.4. Correlations

Pearson correlation coefficients were used to determine whether there are relationships that exist between engagement and job demands/resources and the relationship between burnout and job demands/resources. In Table 4.3, Pearson and Spearman-rho rank-order correlations are

presented. Because most of the variables were not normally distributed 95% bootstrapped confidence intervals are also provided to assist in inspecting statistical significance[2].

Inspection of Table 4.3 shows that there is a large negative relationship between Engagement and Burnout (r_p = -.84, r_s = -.80), a medium negative relationship between Engagement and the Demands (r_p = -.51, r_s = -.56) and a large positive relationship between the Engagement and the Resources (r_p = .44, r_s = .50). Additional correlations were noted between Burnout and Demands (r_p = .64, r_s = .56; large positive relationship), Burnout and Resources (r_p = -.52, r_s =-.61; large negative relationship) and Demands and Resources (r_p = -.22, r_s = -.32; medium negative relationship). All the correlations were statistically significant for both the standard *p* values and bootstrapped confidence intervals.

Table 4.3
Correlation Coefficients Total (Combined)

	Engagement	Burnout	Demands	Resources
Engagement	.	-.80*** (-.83, -.76)	-.47*** (-.55, -.37)	.50*** (.42, .59)
Burnout	-.84*** (-.87, -.79)	.	.56*** (.47, .65)	-.61*** (-.66, -.53)
Demands	-.51*** (-.60, -.41)	.64*** (.54, .71)	.	-.32*** (-.41, -.22)
Resources	.44*** (.32, .53)	-.52*** (-59, -.43)	-.22*** (-.31, -.12)	

Note. Pearson correlation coefficients below the diagonal, Spearman-rho rank order correlation coefficients above the diagonal. 95% bootstrapped confidence intervals in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$.

Inspection of Table 4.4 shows that in Private schools, there is a large negative relationship between Engagement and Burnout (r_p = -.56, r_s = -.52), a large positive relationship between Engagement and Demands (r_p = .47 r_s = .21), and a small positive relationship between Engagement and Resources (r_p = .25, r_s = .13). These correlations were statistically significant, except the Spearman-rho correlation coefficient for Engagement and Resources, which was non-significant. There were also additional correlations between Burnout and Demands (r_p = -.44, r_s = -.27), Burnout and Resources (r_p = -.40, r_s = -.25), and Demands and Resources[3] (r_p = .41, r_s =

[2] A confidence interval that did not include 0 was considered statistically significant at p = .05.
[3] A similar relationship was found using the average of the resources scores instead of the component scores.

.21). The Pearson correlation between Engagement and Resources was statistically significant but the Spearman-rho was non-significant. Closer inspection of the scatterplot between Engagement and Demands indicated a small cluster of respondents who scored high on Engagement and Demands. When removing these and other potential outliers the Pearson correlation coefficient between Engagement and Demands was close to 0. A similar instance occurred for the relationship between Demands and Resources[4].

Table 4.4
Correlation Coefficients Private School

	Engagement	Burnout	Demands	Resources
Engagement		-.52*** (-.63, -.38)	.21** (.04, .37)	.13 (-.04, .29)
Burnout	-.56** (-.67, -.42)		-.27*** (-.42, -.09)	-.25*** (-.40, -.09)
Demands	.47*** (.30, .61)	-.44*** (-.57, -.27)		.21** (.04, .36)
Resources	.25*** (.08, .41)	-.40*** (-.55, -.22)	.41*** (.23, .55)	

Note. Pearson correlation coefficients below the diagonal, Spearman-rho rank order correlation coefficients above the diagonal. 95% bootstrapped confidence intervals in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$.

Inspection of Table 4.5 indicates that in Public schools, there is a large negative relationship between Engagement and Burnout (r = -.77, r = -.55), a medium negative relationship between Engagement and the Demands (r = -.43, r = -.30), and a small positive relationship between Engagement and the Rewards (r = .22, r = .16). There were also relationships between Burnout and Demands (r = .57, r = .43), Burnout and Resources (r = -.25, r =-.22), and Demands and Resources(r = -.04, r = -.01). Most of the correlations were statistically significant.

Table 4.5
Correlation Coefficients Public School

	Engagement	Burnout	Demands	Resources
Engagement		-.55** (-.65, -.41)	-.30*** (-44, -.15)	.16* (-.01, .32)
Burnout	-.77*** (-.83, -.67)		.43** (.30, .55)	-.22** (-.37, -.05)
Demands	-.43*** (-.57, -.26)	.57*** (.44, .69)		-.01 (-16, .16)
Resources	.22** (-.01, 43)	-.25*** (-.42, -.03)	-.04 (-.24, .20)	

Note. Pearson correlation coefficients below the diagonal, Spearman-rho rank order correlation coefficients above the diagonal. 95% bootstrapped confidence intervals in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$.

[4] These cases were not removed for subsequent analyses because it is unclear if these responses were outliers.

4.6. *t*-Tests analysis

The *t*-test analysis[5] was used to compare the means of private and public schools to see whether there were mean score differences in Engagement, Burnout, Demands, and Resources. Comparison of mean score differences for private and public showed that there was a mean score difference between the scale scores. In Table 4.6, the results of the *t*-tests are reported. These results suggest that there was a statistically significant mean score difference in Engagement [$t(302.50) = 16.56$, $p = < .001$], Burnout [$t(355.58) = -27.13$, $p = < .001$], Demands [$t(362.61) = -20.37$, $p = < .001$], and significant results for Resources [$t(373.17) = 9.83$, $p = .97$]. Mean scores and standard deviations are provided in Table 4. Cohen's *d* effect sizes and their 95% bootstrapped confidence intervals for the mean score differences are also reported in Table 4.1. A confidence interval that did not include 0 was considered statistically significant at $p = .05$. Cohen's *d* values were all above 1 indicating that the difference between the two groups is greater than 1 standard deviation.

Table 4.6
Mean score differences between Private and Public schools

				Private		Public		
	t	df	*p*	Mean	SD	Mean	SD	Cohen's *d*
Engagement	16.56	302.50	.00	4.40	.44	3.24	.85	1.66 (1.34, 2.02)
Burnout	-27.13	355.58	.00	1.91	.25	2.85	.36	-2.74 (-3.20, -2.30)
Demands	-20.37	362.61	.00	2.72	.41	3.51	.35	-2.09 (-2.51, -1.71)
Resources	9.83	373.17	.00	.46	.79	-.43	.99	1.00 (.73, 1.24)

Note. 95% confidence intervals in parentheses.

4.7. Moderated Regression

Moderated regression was used to investigate whether teaching in a particular school system (private or public) would moderate the relationship between job demands and burnout/job resources and work engagement. Prior to running the regression analysis, relevant assumptions

[5] Non-parametric tests were also used to investigate differences in the medians and in the two sample group distributions. The results were similar to the *t*-test so therefore only the *t*-test results are shown.

were investigated (i.e., linear relationships in partial plots, normality of residuals, and homoscedasticity). Influential data points were also investigated. For the most part these assumptions were met, and no cases were removed. For the moderation model of job resources on work engagement, the residuals deviated from normality, necessitating caution in interpretation of the *p*-values.

In Table 4.7, the moderation of school for the relationship between burnout and demands controlling for resources is presented. The independent variables jointly explained 77% of the variance in burnout [R^2 = .77, $F(4, 379) = 316.24$, $p < .00$]. The interaction of school and demand controlling for resources was statistically significant ($b = 4.49$, $t = 13.56$, $p < .00$) indicating that there was a moderation effect. In Table 4.8 and Figure 1, the conditional effects of demands for the two schools are presented. It can be seen that for private schools there was a negative relationship between demands and burnout ($b = -.22$, $t = -4.47$, $p = .00$) controlling for resources, and in public schools there was a statistically significant positive relationship ($b = .60$, $t = 11.09$, $p = .00$) controlling for resources.

Table 4.7
Burnout and Demands

	b	SE	*t*	*p*	LLCI	ULCI
Intercept	4.49	.33	13.56	.00	3.84	5.14
Demands	-1.03	.11	-9.13	.00	-1.26	-.81
School	-1.89	.23	-8.05	.00	-2.35	-1.43
Interaction	.82	.07	11.09	.00	.67	.97
Resources	-.09	.02	-5.44	.00	-.12	-.05

Table 4.8
Conditional Effects of Demands at values of the moderator (schools)

	b	SE	*t*	*p*	LLCI	ULCI
Private	-.22	.05	-4.37	.00	-.31	-.12
Public	.60	.05	11.09	.00	.50	.71

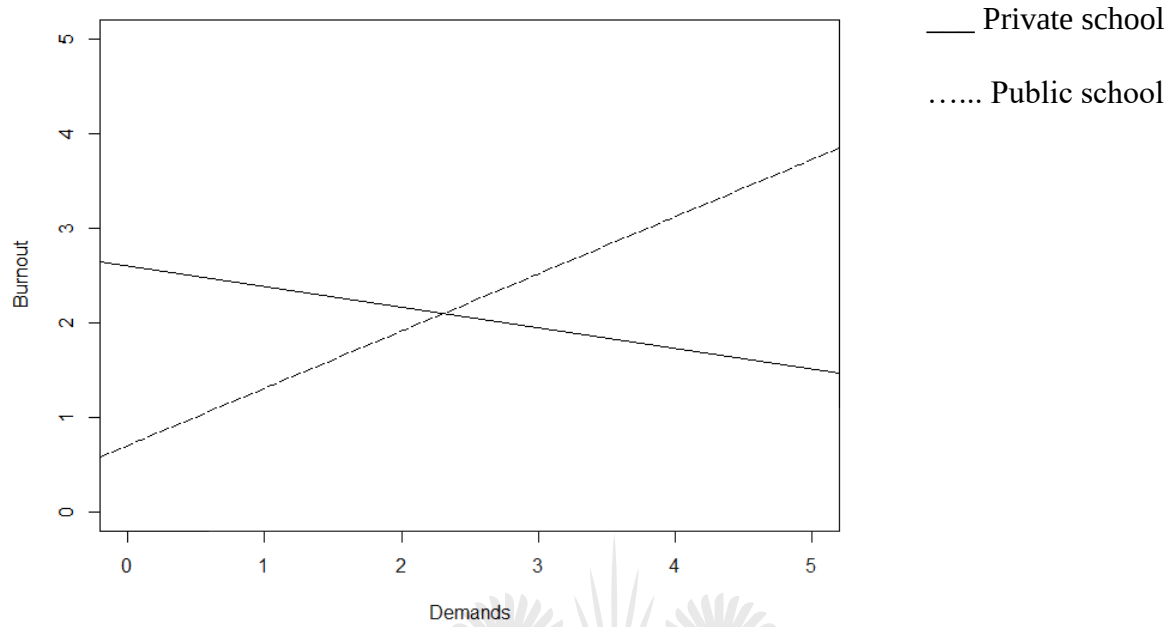


Figure 4.1. The moderation plot for the relationship between burnout and demands controlling for resources

In Table 4.9 the moderation of school for the relationship between burnout and resources controlling for demands is presented. The independent variables jointly explained 70% of the variance in burnout [R^2 = .70, $F(4, 379) = 219.60$, $p < .00$]. The interaction of school and resources controlling for demands was statistically significant (b = .92, t = 9.79, $p < .00$), indicating that there was a moderation effect. In Table 4.10 and Figure 2, the conditional effects of demands for the two school systems are presented. It can be seen that in both private schools (b = -.17, t = -5.76, p = .00) and public schools (b = -.09, t = -4.11, p = .00) there was a negative relationship between resources and burnout controlling for demands.

Table 4.9

Burnout and Resources

	b	SE	*t*	*p*	LLCI	ULCI
Intercept	.92	.09	9.79	.00	.74	1.10
Resources	-.26	.06	-3.99	.00	-.38	-.13
School	.63	.05	12.14	.00	.53	.74
Interaction	.08	.04	2.21	.02	.00	.15
Demands	.18	.04	4.18	.00	.10	.27

Table 4.10

Conditional Effects of Resources at values of the moderator (schools)

	b	SE	*t*	*p*	LLCI	ULCI
Private	-.17	.03	-5.76	.00	-.23	-.11
Public	.09	.02	-4.11	.00	-.13	-.05

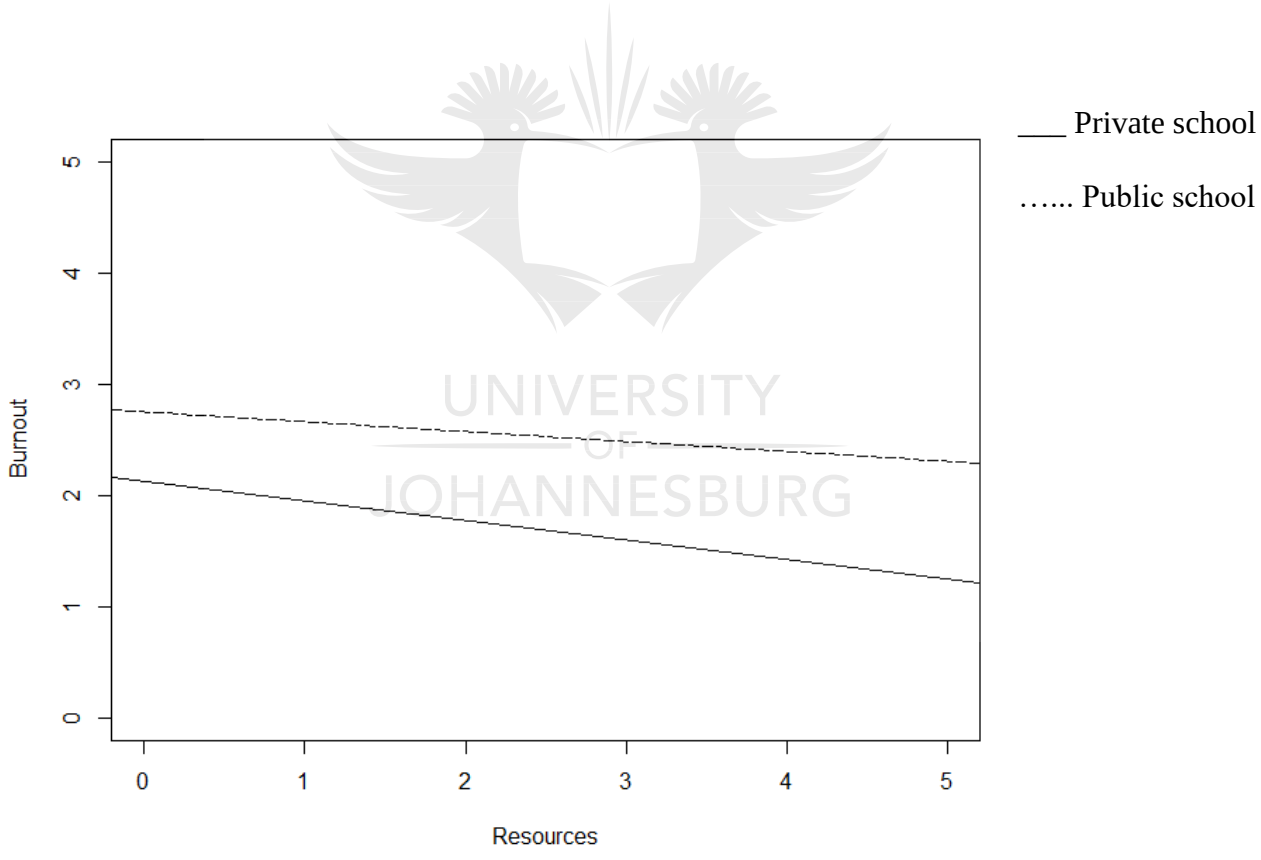


Figure 4.2. The moderation plot for the relationship between burnout and resources controlling for demands

In Table 4.11 the moderation of school for the relationship between demands and work engagement controlling for resources is presented. The independent variables jointly explained 54% of the variance in work engagement [R^2 = .54, F(4, 379) = 110.53, p < .00]. The interaction of school and demand controlling for resources was statistically significant (b = -1.44, t = -8.57, p < .001), indicating that there was a moderation effect. In Table 4.12 and Figure 3, the conditional effects of demands for the two school systems are presented. It can be seen that in both private schools (b = .41, t = 3.62, p = .00) and public schools (b = -1.03, t = -8.35, p = .00) there was a relationship between demands and engagement controlling for resources with a positive relationship in private schools and a negative relationship in public schools.

Table 4.11
Engagement and Demands

	b	SE	*t*	*p*	LLCI	ULCI
Intercept	-.51	.75	-.67	.50	-2.20	1.16
Demands	1.85	.25	7.16	.00	1.31	2.37
School	3.71	.53	6.97	.00	2.24	5.23
Interaction	-1.44	.17	-8.57	.00	1.88	-1.01
Resources	.13	.04	3.67	.00	.02	.24

Table 4.12
Conditional Effects of Demands at values of the moderator (schools)

	b	SE	*t*	*p*	LLCI	ULCI
Private	.41	.11	3.62	.00	.19	.63
Public	-1.03	.12	-8.35	.00	-1.28	-.79

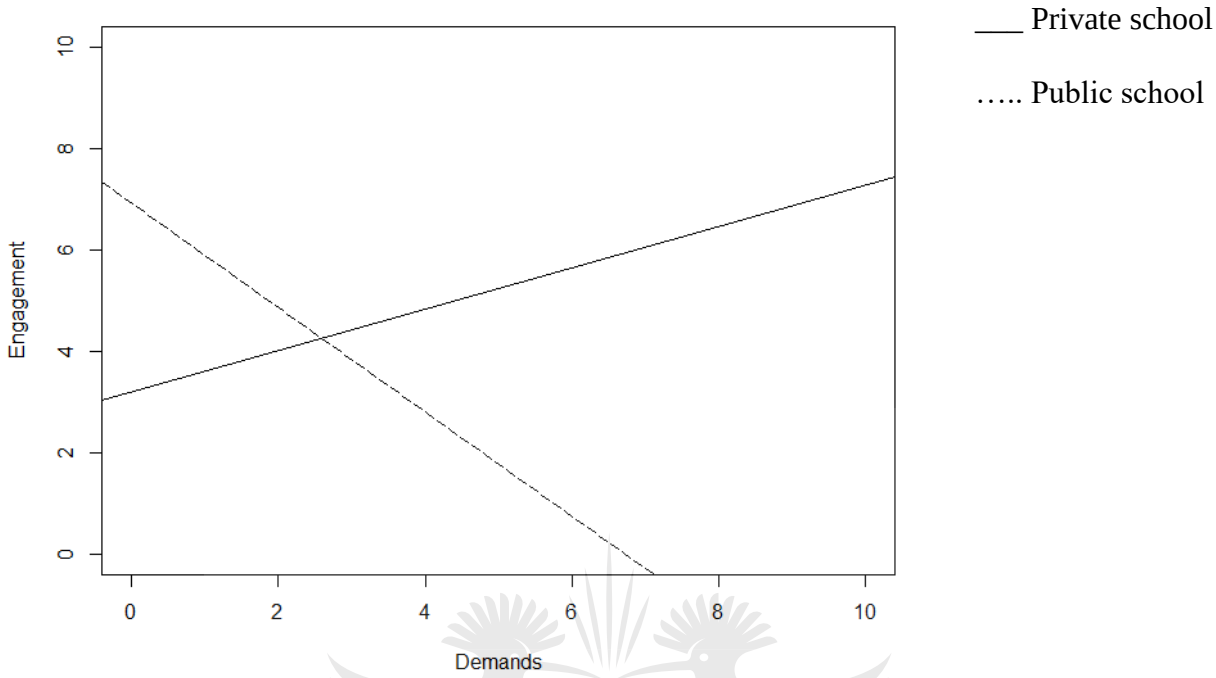


Figure 4.3. The moderation plot for the relationship between demands and work engagement controlling for resources

In Table 4.13 the moderation of school for the relationship between work engagement and resources controlling for demands is presented. The independent variables jointly explained 45% of the variance in work engagement [R^2 = .45, F(4, 379) = 77.24, p < .00]. The interaction of school and resources controlling for demands was statistically significant (b = 5.73, t = 27.96, p < .00) indicating that there was no moderation effect.

Table 4.13
Engagement and Resources

	b	SE	*t*	*p*	LLCI	ULCI
Intercept	5.73	.20	27.96	.00	5.27	6.19
Resources	.20	.14	1.46	.14	-.12	.53
School	-.77	.11	-6.79	.00	-1.09	-.47
Interaction	-.01	.08	-.10	.92	-.24	.23
Demands	-.25	.09	-2.65	.01	-.51	.02

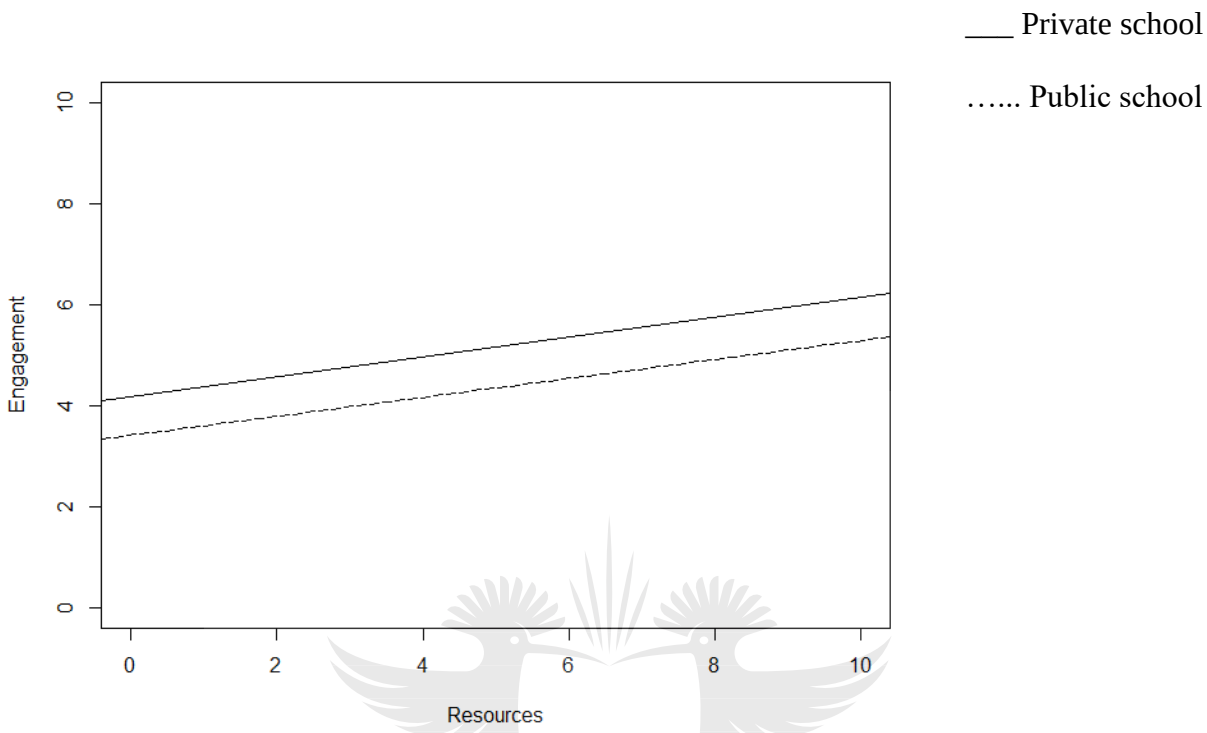


Figure 4.4. The moderation plot for the relationship between work engagement and resources controlling for demands

4.8. Conclusion

The chapter provided the results obtained from the statistical analyses conducted in SPSS. The statistical analyses were used in order to investigate the relationship between job demands–resources and work engagement/burnout of teachers in private schools and public schools. A detailed discussion of the results obtained in this chapter will follow in Chapter 5.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1 Chapter Introduction

This chapter discusses the results presented in Chapter 4 in relation to the aims of the study. Before discussing the results, an outline of the aims and objectives of the study will be provided. Thereafter, the results in relation to each aim are given. The chapter will then conclude the study with a consideration of the implications of the study and recommendations for further research.

5.2 Aims

This study set out to investigate the relationship between job demands and job resources and burnout and work engagement among teachers in public and private schools. Using the JD-R, the study aims to gain a better understanding of how the availability or lack of job resources and job demands in private and public schools moderate work engagement and burnout. To answer the research aim, the following research questions are asked:

1) What is the relationship between work engagement and job resources?
2) What is the relationship between work engagement and job demands?
3) What is the relationship between burnout and job demands?
4) What is the relationship between burnout and job resources?
5) What is the difference in the work engagement levels between teachers in public and private schools?
6) What is the difference between burnout levels between teachers in public and private schools?
7) Does teaching in a private or public school moderate the relationship between job demands and burnout?

8) Does teaching in a private or public school moderate the relationship between job resources and engagement?

5.3. The relationship between Work Engagement and Job Resources and the Relationship between Work Engagement and Job Demands

As it was expected, the results showed that there was a strong linear positive correlation between work engagement and job resources and a strong linear negative correlation between work engagement and job demands. This means that an increase in job resources causes an increase in work engagement. There are various studies that have showed the relationship between work engagement and job resources, using the JD-R model. This is consistent with the findings of Bakker et al. (2007), who hypothesised that job resources are positively related to work engagement. Schaufeli and Bakker (2004) also found this in their study that stated that job resources often increase work engagement. For example, in an employment relationship, the premise is that the employee inputs (work engagement and commitment to work) are given in exchange for benefits (job resources). In other words, it is evident that work engagement is determined by the presence of job resources (De Braine & Roodt, 2011). This is referred to as the social exchange theory. From another perspective, it is reported that schools are likely to achieve their collectively-held goals (work engagement) by allowing teachers to display their competence and allowing shared decision-making opportunities (job resources) (Leithwood, Menzies, Jantzi, & Leithwood, 1999). Furthermore, it is evident that if organisations do not make provision for sufficient job resources, there will be long-term consequences such as disengagement and reduced commitment (Rothmann & Jordaan, 2006). Rothmann and Jordaan (2006) are of the opinion that employees tend to invest their energy when the following needs are met: firstly, resources need to be available; secondly, the organisation should at least provide an

environment that enables employees to display their competence and fulfil their needs. In cases where there is a lack of resources, employees cannot avoid potential negative influences of high job demands, thus not being able to achieve work goals or advance themselves in the job and organisation. When a loss of job resources occurs, employees retaliate against the loss by being disengaged from their jobs (Jackson &Rothmann, 2005; Jackson &Rothmann, 2006; Jackson, Rothmann & van de Vijver, 2006).

On the other hand, a decrease in demands is related to an increase in work engagement. According to Bakker et al. (2007), job resources are likely to buffer the negative impact of job demands on work engagement. Schaufeli and Bakker (2004) found that an increase in job resources is likely to prevent the outcomes of job demands. This is also in line with findings of De Brain and Roodt (2011), who postulate that job resources are a strong predictor of work engagement, particularly when high job demands are present.

When looking at the relationships within the schools it was found that in private schools, there is a small positive relationship between job demands and work engagement. This means that when job demands increase, work engagement also increases. Since there is not much research to support this finding, it can be assumed that teachers in private schools tend to feel the need to bridge the gap when job demands are high. In other words, because they do not lack job resources, teachers in private schools have more time to focus on achieving their teaching goals. This can be supported by the theory of Bakker et al. (2007) that job resources buffer the negative impact on work engagement when job demands are high. Rothmann and Jordaan (2006) are also of the opinion that the presence of job resources is likely to reduce the impact of job demands and despite high demands, there are individuals that experience work engagement. It was also found that despite long working hours and high burnout levels, a large percentage of university

lecturers found their work motivating; they enjoyed it and found their work rewarding (Doyle & Hind, 1998). However, as indicated in Chapter 4, this relationship might have been affected by the small cluster of participants who scored high on Engagement and Demands. It is important to consider that this might reflect within school differences. When these items and other potential outliers were removed, the Pearson correlation coefficient between Engagement and Demands was close to 0.

There was a small to medium positive linear relationship between job resources and work engagement. This implies that when job resources increase, work engagement increases. A number of studies done using the JD-R model supports this. These studies all found that job resources are positive predictors of work engagement (Altunel, Kocak, & Cankir, 2015; Bakker & Bal, 2010; Bakker et al., 2007; Rothmann & Jordaan, 2006).

It was found that in public schools, there was a medium negative relationship between job demands and work engagement. This implies that when job demands increase, work engagement decreases. These results are expected because in public schools, it was found that teachers experience more demands than resources. As also indicated in the JD-R model that when an individual lacks resources, they are often unable to deal with the demands which then promotes them withdrawing from their job (Demerout, Bakker, Nachreiner, and Schaufeli, 2001). In most cases, teachers in public schools are often overwhelmed with work and their need of having sufficient resources is not met (Johnson, & Birkeland, 2003). Because of their needs not being met, it is unlikely that they will be engaged in their work and it is likely that they will lose their energy. Also, in public schools there was a linear positive relationship between job resources and work engagement. This is expected because when teachers have resources available at their disposal, it is likely that they will be engaged in their work.

5.4. The Relationship between Burnout and Job Resources and the Relationship between Burnout and Job Demands

There was a medium to strong negative relationship between burnout and job resources. This means that when job resources increase, burnout decreases. There was furthermore a strong linear positive relationship between burnout and job demands. This implies that an increase in job demands is related to an increase in burnout. This is consistent with studies conducted by Demerout, Bakker, Nachreiner, and Schaufeli (2001) and Jackson and Rothmann (2005), who looked into specific job demands and job resources and found that job demands (overload), limited growth opportunities, and limited control are the best predictors of exhaustion and disengagement of teachers in South Africa. These authors also found that job demands predicted some variance in burnout (exhaustion), which is confirmed by Schaufeli and Enzmann (1998). According to Demerouti, Bakker, Nachreiner, and Schaufeli (2001), the JD-R model is of the assumption that there will be a development of burnout, regardless of the occupation, when there are high job demands and low job resources, because these undesirable working conditions respectively discourage motivation of the employees and lead to the depletion of their energy.

When looking within schools, it was found that in private schools, there is a medium to strong positive relationship between burnout and job demands. However, it is important to consider that this may possibly be caused by the small cluster of participants that scored high on these factors. In addition, the relationship between burnout and demands in private schools is unexpected. It may be possible that job demands may have not been assessed sufficiently or research studies on the role of job demands have been ambiguous (see Crawford, LePine, & Rich, 2010; Hakanen, Schaufeli, & Ahola, 2008; Ventura, Salanova, & Llorens, 2015). In this study it is important to be aware that only one demand (overload) was measured. Another

possible reason may be that based on the transactional theory of stress, individuals perceive stressors such as demands by categorising them as a challenge or a hindrance. Teachers in private schools may perceive the demands as challenge demands rather than hindrance demands and this may because challenge demands potentially allow for personal growth, spark positive emotions and active coping styles (LePine, Podsakoff, & LePine, 2005; Ventura, Salanova, & Llorens, 2015). In other words, these teachers may perceive their demands as an opportunity to grow and become accomplished (Podsakoff, LePine, & LePine, 2007; Ventura, Salanova, & Llorens, 2015) This means that although there are job demands in their work, they are able to cope with them. In addition, as expected, when resources increase, the level of burnout decreases. In public schools, there is a strong linear positive relationship between burnout and job demands. There is a strong linear negative relationship between burnout and job resources.

5.5. Mean Score Differences

The results showed that there were large mean score differences in work engagement, burnout, demands, and resources. The statistical evidence shows that there are significant differences between private and public schools with regards to the abovementioned factors. As mentioned above, these differences may be caused by the small group of participants that scored high on the scales. Another reason may be because, teachers have different perceptions of their work and results from the study indicate that teachers in the different schools have different views based on the lack of resources and presence of job demands. One of the aims of this study was to investigate whether there would be differences between private and public schools and the results are as expected. Although mean score differences were observed, it must be kept in mind that measurement invariance was not first established for the two school groups. Therefore, the

mean score differences should not be over-interpreted because it is not clear how much these mean score differences are influenced by lack of invariance (i.e., item and test bias).

5.6. Multiple Moderated Regression

To investigate the moderation effect of type of school on the relationship between engagement/burnout and demands, while controlling for resources, and the moderation effect on the relationship between engagement/burnout and resources, while controlling for demand, moderated multiple regression was used. There is limited information regarding the influence of private or public schools on the aforementioned factors. There was a significant interaction between school type and job demands. This implies that the type of school in which a teacher worked, acted as a moderator between job demands and burnout. The results found that there was a significant positive between burnout and job demands in both private and public schools. The idea that school type is a moderator of the relationship between burnout and job demands in public schools carries implications for the government, which will be discussed later in the chapter. There was no significant interaction between school and resources, indicting that there was no moderation effect in both private and public schools.

The results showed that when controlling for job resources, job demands explained 57% of work engagement and there was a statistically significant interaction between school and job demands. This implies that there was a moderation effect. However, the moderation occurred in public schools. This could mean that being in a public school has some sort of effect on the burnout of teacher caused by job demands. On the other hand, the interaction of school and job resources was not statistically significant. This means that there was no moderation effect by either of the schools. This implies that a teacher's experience of having job resources will be

similar, no matter whether he or she works in a private or public school. These findings are consistent with the JD-R model predictions as indicated by Jackson and Rothmann (2005).

5.7. Implications and recommendations

5.7.1. Theory

It is evident that the JD-R model has become more versatile and seemed to be a useful model in investigating the phenomena under study. It has been evident through the results that if job resources are increased and job demands are reduced, there are better chances that work engagement will increase and burnout will decrease (Hakanen et al., 2006; Hu, Schaufeli & Taris, 2017). Because the JD-R model describes both stressful and motivational aspects of occupations (teaching in this case), it can be seen as the most practical tool to assess and improve the well-being of teachers. Most importantly, it has been reported that compared to their colleagues that have burnout symptoms, healthy and engaged teachers have the likelihood to perform well and achieve their goals (Guglielmi & Tatrow, 1998; Rudow, 1999). Being exposed to high demands and low resources is likely to predict burnout symptoms. Whereas, having necessary job resources promotes work engagement even in the presence of high demands (Bakker, Schaufeli, Bulters, van Rooijen, & ten Broek, 2002; Hu, Schaufeli & Taris, 2017).

5.7.2. Practice

It is important to consider that there are demands that teachers can reduce themselves, such as their interactions with colleagues and/or support from superiors. Then, there are job demands over which they have very limited control, such as work overload and/or pupils that are challenging. Job resources are important to motivate teachers, thus an increase in job resources is likely to increase work engagement of teachers, especially in public schools. The government

could investigate interventions that will focus on factors such as management, reward systems, job design and employee relations (see also Jackson, Rothmann, & van de Vijver, 2006). Many teachers feel that management does not realise the amount of work overload as a result of the implementation of new curricula in a short space of time (Naidu, 2005). The implications of this study include a decrease in job demands, especially in public schools, because from the results there is some evidence that teachers in public schools experience high levels of burnout as a result of the lack of resources and high job demands. When job demands are high, coaching and support should be readily available in their work environment so that their mental strength can be improved. Also, the government could look into training that provide coping mechanisms for teachers when they are exposed to demands. For this to work, the government needs to be aware of the demands that are often exposed to teachers so that they are able to provide support that is practical and relevant to the needs of the teachers. When job demands are decreased, burnout will be reduced and work engagement will increase. This might also result in fewer teachers leaving the teaching profession (early retirement), which is likely to cost the state more money than it may have cost to provide the teachers with necessary resources (Darling-Hammond, 2003). Jackson and Rothmann (2005) showed that secondary school educators were the third highest risk group in terms of poor work-related well-being in South Africa.

Although a large amount on the budget in South Africa is directed to education, the government should consider reviewing where and how the funds are used through frequent audits. With this known, the relevant resources can be provided to those that need it most because this may be a factor in the decreased quality of education and reduced teacher commitment. With regards to policies, the government could benefit from enquiring about the success factors in independent schools and find a way to match such standards. Another

implication of the study (though not directly related) is that it would be beneficial if fit between person and organisation is established before entering the profession.

5.8. Limitations

The nested structure of the data was not considered in this study. That is, teachers are nested within schools. Multilevel modelling is recommended in future studies to account for this nested structure and help clarify the sources of variance in the model variables. The findings from this study resulted from a cross-sectional design. Therefore, although the study claimed to assess the differences in teacher well-being using the JD-R model, it would not be completely accurate to draw final conclusions about the causal relationships between the variables included in the study. The model used does not include any teacher -specific job characteristics such as misbehaviour of learners or unsupportive parents. A longitudinal study is also recommended in order to investigate other underlying factors in the relationships between the variables. The sample may not have been an accurate representation of all teachers in South Africa (in private or public schools). The study was also general in terms of private and public schools, as with these two domains there are also different sub-types within the types of schools. For example, there are rural public schools or semi-private institutions that could have been considered in the study. These are the potential moderators that could be considered in future research. Since teaching is perceived as a profession that requires high commitment to the extent that it can be regarded as a calling, the individuals in the teaching profession have different motives and feelings attached to their work as teachers. This study did not take into account the effect of individual differences and preferences that could affect teachers' well-being. Measurement invariance was not established in this study making direct comparisons (i.e., mean score differences) across schools problematic. Establishing measurement invariance can help clarify the source of potential mean

score differences in the variables. The study did not take into account the personal resources that were incorporated into the model which play a role in the JD-R model but there are limited studies that studied the relationship between personal resources and job resources (Schaufeli &Taris, 2014).

5.9. Conclusion

This chapter focused on the discussion of the results in relation to the specific aims of the study. This study set out to investigate the relationship between job demands and job resources, and burnout and work engagement among teachers in public and private schools. Using the JD-R model, the study aimed to gain a better understanding of how the availability or lack of job resources and job demands in private and public schools moderated work engagement and burnout. It was found that there were relationships between the investigated factors, as expected. It was also found that there are mean score differences between private and public schools. There was also a moderation effect between these factors, especially in public schools. This makes it evident that in private schools, teachers are more engaged and experience lower burnout because they do not seem to lack of job resources. Although job demands are present, private school teachers may view these demands as challenge demands, rather than hindrance demands. To this end, these teachers are able to cope with the job demands that are present. In the case of public schools, teachers seem more disengaged and there is more burnout among them because they seem to have fewer job resources and tend to experience a high level of job demands, compared to teachers in private schools. The study contributes towards understanding how the availability of job demands and resources led teachers to be either engaged in their work or experience burnout.

REFERENCES

Ash, D., Gold, G., Seiver, A., & Hayes-Roth, B. (1993). Guaranteeing real-time response with limited resources. *Artificial Intelligence in Medicine*, *5*(1), 49-66.

Altunel, M. C., Kocak, O. E., & Cankir, B. (2015). The Effect of Job Resources on Work Engagement: A Study on Academicians in Turkey. *Educational Sciences: Theory and Practice*, *15*(2), 409-417.

Bakker, A. B., & Bal, P. M. (2006). *How work engagement influence performance: A weekly diary study among starting teachers.* Manuscript submitted for publication.

Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of stress management*, *10*(1), 16.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resources Management Journal*, *43*, 83–104.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, *22*(3), 309-328.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career development international*, *13*(3), 209-223. Retrieved from: https://www.isonderhouden.nl/doc/pdf/arnoldbakker/articles/articles_arnold_bakker_164.pdf

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, *99*(2), 274.

Bakker, A. B., Rodríguez-Muñoz, A., & Vergel, A. I. S. (2015). Modelling job crafting behaviours: Implications for work engagement. *Human relations*, *69*(1), 169-189. doi: 10.1177/0018726715581690

Bakker, A. B., Schaufeli, W. B., Bulters, A. J., Van Rooijen, A., & Ten Broek, E. (2002). Carriere counseling voor artsen via Internet [Career counseling for doctors through the Internet]. *Medisch Contact*, *57*, 454-456.

Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work and Stress*, *22*, 187–200.

Barling, J. (1999). Changing employment relations: Empirical data, social perspectives and policy options. In D.B. Knight & A. Joseph (Eds.), Restructuring societies: Insights from thesocial sciences (pp. 59-82). Ottawa: Carlton University Press.

Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2008). What is job crafting and why does it matter? Theory-to-practice briefing, Center for positive organizational scholarship, Michigan Ross School of Business. Ann Arbor, MI. Retrieved from http://www.bus.umich.edu/Positive/POS-Teaching-and-Learning/ListPOS-Cases.htm

Bergh, Z. C. (2009). Research and other methods in psychology. In Z. C. Berg and A. L. Theron (Eds.), Psychology in the work context (4th ed.) (pp. 433-463). Cape Town, South Africa: Oxford University Press Southern Africa.

Bisschoff, T., & Mestry, R. (2009). *Financial School Management Explained (3rd ed.)*. Cape Town: Pearson Education South Africa.

Bloch, G. (2010). Education a tried and tested route out of poverty. *The Mercury*, April 26:1.

Brill, P. L. (1984). The need for an operational definition of burnout. *Family & Community Health, 6,* 12-24.

Buunk, B. P., & Schaufeli, W. B. (1993). Burnout: A perspective from social comparison theory. *Professional burnout: Recent developments in theory and research*, 53-69.

Byrne, B. M. (1994). Burnout: Testing for the validity, replication, and invariance of causal structure across elementary, intermediate, and secondary teachers. *American Educational Research Journal*, *31*(3), 645-673.

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. Journal of Applied Psychology, 85, 65–74

Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers college record*, *111*(1), 180-213.

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Coetzee, M., Schreuder, D., & Tladinyane, R. (2014). Employees' work engagement and job commitment: the moderating role of career anchors. *SA Journal of Human Resource Management*, *12*(1), 1-12.

Crawford, E. R, LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. Journal of Applied Psychology 95(5): 834–848. doi: 10.1037/a0019364

Cross, M., Mungadi, R., & Rouhani,S. (2002). From policy to practice: curriculum reforms in South African education. *Comparative Education, 38*(2), 171-187.

Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational leadership, 60*(8), 6-13.

Davids N. & Makwabe B. (2007). *Teachers can't take it anymore*. Sunday Times, 9 September: 1.

De Braine, R., & Roodt, G. (2011). The Job Demands Resources model as predictor of work identity and work engagement: A comparative analysis. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 37(2), 1-11. doi:10.4102/sajip.v37i2.889

de Bruin, G. P., & Henn, C. M. (2013). Dimensionality of the 9-item Utrecht Work Engagement Scale (UWES-9). *Psychological Reports, 112*(3), 788-799. doi: 10.2466/01.03.PR0.112.3.788-799

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology, 86*(3), 499.

Demerouti, E., & Bakker, A. B. (2008). The Oldenburg Burnout Inventory: A good alternative to measure burnout and engagement. *Handbook of stress and burnout in health care. Hauppauge, NY: Nova Science*.

Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology, 37*(2), 01-09.

Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology, 37*(2), 01-09.

Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work and Environment and Heath, 27,* 279–286.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing, 32,* 454-464.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands – Resources Model of burnout. *Journal of Applied Psychology, 86,* 499– 512.

Demerouti, E., Bakker, A.B., Vardakoy I. & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. European Journal of Psychological Assessment, 19, 12-23.

Demerouti, E. & Nachreiner, F. (1998). **Zur** Spezifit5t von Burnout fiir Dienstleistungsberufe: Fakt oder Artefakt [On the specificity of burnout for human services: Fact or artefact]. *ZeitschnBfitr Arbeitswissenschaft, 52,* 82-89.

Department of Education. (1996). *Interim policy for early childhood development*. Pretoria: Department of Education. Retrieved from: http://www.education.gov.za/LinkClick.aspx?fileticket=z0HsM2jsd8I%3D&tabid=453&mid=469

Department of Education. (1997). Government Gazette No 18480 Vol 389: *Education Law Amendment Act, 1997.* Pretoria: Government Printers

De Simone, S. (2014). Conceptualizing wellbeing in the workplace. *International Journal of Business and Social Science, 5*(12).

Diener, E., & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social indicators research*, *40*(1-2), 189-216.

Doyle, C., & Hind, P. (1998). Occupational stress, burnout and job status in female academics. *Gender, work & organization*, *5*(2), 67-82.

Efron, B. (1987). Better bootstrap confidence intervals. *Journal of the American statistical Association*, *82*(397), 171-185.

Efron, B., & Tibshirani, R. J. (1994). *An introduction to the bootstrap*. CRC press.

Epple, D., & Romano, R. E. (1998). Competition between private and public schools, vouchers, and peer-group effects. *American Economic Review*, 33-62.

Field, L. K., & Buitendach, J. H. (2011). Happiness, work engagement and organisational commitment of support staff at a tertiary education institution in South Africa. *SA Journal of Industrial Psychology*, *37*(1), 01-10. Retrieved from: http://www.scielo.org.za/pdf/sajip/v37n1/v37n1a06.pdf

Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews*, *12*, 384-412. doi: 10.1111/j.1468-2370.2009.00270.x

Fiske, E. B., & Ladd, H. F. (2004). Balancing public and private resources for basic education: school fees in post-apartheid South Africa. *Changing class: Education and social change in post-apartheid South Africa*, 57-88.

Fourie, M., & Deacon, E. (2015). Meaning in work of secondary school teachers: A qualitative study. *South African Journal of Education*, *35*(3).

Friedman, I. (1995). Student behavior patterns contributing to teacher burnout. *The Journal of Educational Research, 88,* 281-289.

Gauteng Provincial Legislature (1995). School Education Act, 1995. Act No 6 of 1995. Gauteng Province.

Gerlanc, D. & Kirby, K. (2015). bootES: Bootstrap Effect Sizes. R package version 1.2. Retrieved from https://CRAN.R-project.org/package=bootES

Ghitulescu, B. E. (2006). *Shaping tasks and relationships at work: Examining the antecedents and consequences of employee job crafting* (Unpublished doctoral thesis). University of Pittsburgh, USA. Retrieved from http://scholar.google.co.za/scholar?hl=en&as_sdt=0,5&q=shaping+tasks+and+relationships+at+work%3aexamining+the+antecedents+and+consequences+of+employee+job+crafting

Goldhaber, D. D. (1996). Public and private high schools: Is school choice an answer to the productivity problem?. *Economics of Education Review, 15*(2), 93-109.

Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research, 68*, 61–99.

Grice, J. W. (2001). Computing and evaluating factor scores. *Psychological Methods, 6*(4), 430-450. Retrieved from http://dx.doi.org/10.1037/1082-989X.6.4.430

Hakanen, J.J., Bakker, A.B., & Schaufeli, W B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*, 495–513.

Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, *22*(3), 224-241.

Harter, J.K., Schmidt, F.L., & Keyes, C.L. (2002). Well-Being in the Workplace and its Relationship to Business Outcomes: A Review of the Gallup Studies. In C.L. Keyes & J. Haidt (Eds.), *Flourishing: The Positive Person and the Good Life* (pp. 205-224). Washington D.D.: American Psychological Association.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.

Henn, C., & Barkhuizen, N. (2009). Measures of affective behavior, adjustment and well-being. *Introduction to Psychological Assessment in the South African context,*, 150-151.

Hu, Q., Schaufeli, W. B., & Taris, T. W. (2011). The job demands–resources model: An analysis of additive and joint effects of demands and resources. *Journal of vocational behavior*, *79*(1), 181-190.

Hu, Q., Schaufeli, W. B., & Taris, T. W. (2017). How are changes in exposure to job demands and job resources related to burnout and engagement? A longitudinal study among Chinese nurses and police officers. *Stress and Health*, *33*(5), 631-644.

Immelman, R. & Roberts-Lombard, M. (2015). Guidelines for the marketing of independent schools in South Africa. *Acta Commercii*, *15*(1), 1-9, http://dx.doi.org/10.4102/ac.v15i1.245

Ingersoll, R. M., Alsalam, N., Bobbitt, S., & Quinn, P. (1997). *Teacher professionalization and teacher commitment: A multilevel analysis*. DIANE Publishing.

Independent Schools' Association of Southern Africa (ISASA). (2005). *The Independent School Sector in South Africa 2005*. Available at www.isasa.org

Jackson, L. T. B. (2004). *Burnout and engagement of teachers in the North West Province* (Doctoral dissertation, North-West University).

Jackson, L. & Rothmann, S. (2005). Work-related well-being of educators in a district of the North-West province. *Perspectives in Education, 23,* 107-122.

Jackson, L., & Rothmann, S. (2006). Occupational stress, organisational commitment, and ill-health of educators in the North West Province. *South African journal of education*, *26*(1), 75-95.

Jackson, L. T., Rothmann, S., & Van de Vijver, F. J. (2006). A model of work-related well-being for educators in South Africa. *Stress and health*, *22*(4), 263-274. doi: 10.1002/smi.1098

Jimenez, E., Lockheed, M. E., & Paqueo, V. (1991). The relative efficiency of private and public schools in developing countries. *The World Bank Research Observer*, *6*(2), 205-218.

Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal*, *40*(3), 581-617.

Joubert, J. H. M., & Rothmann, S. (2007). Job demands, job resources, burnout and work engagement of managers at a platinum mine in the North West Province. *South African Journal of Business Management*, *38*(3), 49-61.

Kallaway, P. (2007). The profound crisis of teaching. Retrieved from: http://mg.co.za/article/2007-08-21-the-profound-crisis-of-teaching

Karp, S. (2007). Beyond the classroom – deep reforms including broader policy struggles. *Education South Africa*. *Life Long Learning*, *1*(5), 5.

Kelley, K. (2018). MBESS: the MBESS R package. R package version 4.4. 3. Retrieved from https://CRAN.R-project.org/package=MBESS

Khan, W. A. (1990), "Psychological Conditions of Personal Engagement and Disengagement at Work", *Academy of Management Journal*, pp. 692-724.

Kitaev, I. (1999). *Private Education in Sub-Saharan Africa: A Re-Examination of Theories and Concepts Related to Its Development and Finance. Mechanisms and Strategies of Educational Finance*. International Institute for Educational Planning/UNESCO, 7-9 rue Eugene-Delacroix, 75116 Paris, France.

Kolade, O. (2019). Universal basic education in Nigeria: can non-state actors make a difference?. *Quality Assurance in Education*, *27*(2), 179-196.

Krishna, A. R. (2014). *From OBE to CAPS: educators' experiences of the new life skills curriculum in the foundation phase* (Doctoral dissertation, University of KwaZulu-Natal).

Kubberud, V., Helland, A., & Smith, R. L. (1999). Teachers in the South: Their development and conditions of service. *LINS Report*, *5*.

Lee, R. T., & Ashford, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, *81*, 121–133.

Leithwood, K. A., Menzies, T., Jantzi, D., & Leithwood, J. (1999). Teacher burnout: A critical challenge for leaders of restructuring schools. In A. M. Huberman (Ed.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 85–114). New York: Cambridge University Press.

LePine, J. A., Podsakoff, N. P., & LePine M. A. (2005). A meta-analytic test of challenge stressors–hindrance stressors framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, *48*, 764–775. doi: 10.5465/AMJ.2005.18803921

Levert, T., Lucas, M. & Ortlepp, K. (2000). Burnout in psychiatric nurses: Contributions of the work environment and a sense of coherence. *South African Journal of Psychology, 30*, 36-43.

Maniram, R. (2007). *An investigation into the factors affecting job satisfaction at the Kwa Zulu Natal Further Education and Training College – Swinton Campus*. Unpublished M.Ed. dissertation. Pretoria: University of South Africa.

Mann, C. J. (2003). Observational research methods. Research design II: cohort, cross sectional, and case-control studies. *Emergency medicine journal*, *20*(1), 54-60.

Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, *13*(6), 522-526.

Maslach, C. (1982). *Burnout: The cost of caring*. New York: PrenticeHall.

Maslach, C. & Jackson, S.E. (1986). The *Maslach Burnout Inventory* (2 ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Jackson, S.E. & Leiter, M. (1996). *Maslach Burnout Inventory: Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, *52*(1), 397-422.

Maslach, C. & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In Schaufeli, W. B., Maslach, C. & Marek, T. (Eds). Professional burnout: Recent developments in theory and research. USA: Taylor & Francis

Matveev, A. V. (2002). The advantages of employing quantitative and qualitative methods in intercultural research: Practical implications from the study of the perceptions of intercultural communication competence by American and Russian managers. *Russian Journal of Communication, 1*, 59-67.

McDonald, R. P. (2013). *Test theory: A unified treatment*. New York: Psychology Press.

Mesthrie, R. (1999). The role of principals in the management of stress and burnout. *Education Practice*, *3,* 19-23.

Minitab Blog Editor (2015, April). Understanding Hypothesis Tests: Confidence Intervals and Confidence Levels [Web log post]. Retrieved from https://blog.minitab.com/blog/adventures-in-statistics-2/understanding-hypothesis-tests-confidence-intervals-and-confidence-levels

Miraj, S., Reba, A., & Din, J. U. (2018). A Comparative Study regarding Teachers' Morale among Public and Private Schools at Secondary Level in Peshawar. *Bulletin of Education and Research*, *40*(2).

Modisaotsile, B. M. (2012). The failing standard of basic education in South Africa. *Policy Brief*, 72, 1-7.

Mohlala, T. (2010). Limpopo, KZN home to SA's worst schools. *Mail and Guardian Online*, *29*.

Neil A. Weiss (2016). wBoot: Bootstrap Methods. R package version 1.0.3. Retrieved from https://CRAN.R-project.org/package=wBoot

Ololube, N. P. (2006). Teacher education, school effectiveness and improvement: A study of academic and professional qualification on teachers' job effectiveness in Nigerian secondary schools.

Omanukwue, P. N. (2013). *Factors that influence job engagement among heads of departments at secondary schools in Eldorado Park* (Doctoral dissertation, UNIVERSITY OF JOHANNESBURG).

Panday, S., & Arends, F. (2008). School drop-outs and imprisoned youths. Retrieved from: http://repository.hsrc.ac.za/handle/20.500.11910/5482

Pillay, H. K., Goddard, R., & Wilss, L. A. (2005). Well-being, burnout and competence: Implications for teachers. *Australian Journal of Teacher Education, 30*(2), 22-33. Retrieved from https://files.eric.ed.gov/fulltext/EJ1069619.pdf

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor–hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*, 438–454. doi: 10.1037/0021-9010.92.2.438

Pretsch, J., Flunger, B., Heckmann, N., & Schmitt, M. (2013). Done in 60 s? Inferring teachers' subjective well-being from thin slices of nonverbal behavior. *Social Psychology of Education, 16*(3), 421-434. doi: 10.1007/s11218-013-9223-9

Price, R. H., & Hooijberg, R. (1992). Organizational exit pressures and role stress: Impact on mental health. *Journal of Organizational Behavior*, *13*(7), 641-651. doi: 10.1002/job.4030130702

R Core Team (2019) *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna. Retrieved from https://www.R-project.org/.

Reddy, V., Prinsloo, C. H., Netshitangani, T., Moletsane, R., Juan, A., & Janse van Rensburg, D. (2010). An investigation into educator leave in the South African ordinary public schooling system. Retrieved from: http://repository.hsrc.ac.za/bitstream/handle/20.500.11910/4247/6378.pdf?sequence=1

Republic of South Africa (RSA) President's Office (1996a). National Education Policy Act No. 27 of 1996. Cape Town: Government Printer, Republic of South Africa.

Roberts, D.R. & Davenport, T.O. (2002, Autumn). Job engagement: Why it's important and how to improve it. *Employment Relations Today*, 21-29.

Roper, M. (2007). School Safety – turning the tide! *Education Southern Africa*. Life Long Learning, 5, 20-21.

Rothmann, S. (2003). Burnout and engagement: A South African perspective. *SA Journal of Industrial Psychology*, *29*(4).

Rothmann S., and Jordaan G., M., E. (2006). Job Demands, Job Resources and Work Engagement Of Academic Staff In South African Higher Education Institutions. *SA Journal of Industrial Psychology*, 32 (4), 87-96.

Rooth, E. (2005). *An investigation of the status and practice of Life Orientation in South African schools in two provinces*(Doctoral dissertation, University of the Western Cape).

Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In A. M. Huberman (Ed.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 38– 58). New York: Cambridge University Press.

Schaufeli, W. B. (2017). Applying the job demands-resources model. *Organizational Dynamics*, *2*(46), 120-132.

Schaufeli, W. B., & Bakker, A. B. (2003). Utrecht work engagement scale: Preliminary manual. Occupational Health Psychology Unit, Utrecht University, Utrecht.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *25*(3), 293-315.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, *66*(4), 701-716.

Schaufeli, W. B. & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis.* London: Taylor & Francis.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*, 71–92.

Schaufeli, W. B., Taris, T., Le Blanc, P., Peeters, M., Bakker, A. B., & de Jonge, J. (2001). Maakt arbeid gezond? Op zoek naar de bevlogen werknemer [Does work make healthy? The quest for the engaged worker]. *De Psycholoog, 36*, 422–428.

Seligman, M.E.P. & Csikszentimihalyi, M. (2000). Positive Psychology: An introduction. *American psychologist, 55*, 5-14.

Selod, H., & Zenou, Y. (2003). Private versus public schools in post-apartheid South African cities: Theory and policy implications. *Journal of Development Economics*, *71*(2), 351-394.

Sosibo, L., & Nomlomo, V. (2014). Teachers' conceptions of standards in South African Basic Education and Training: A case study. *Perspectives in Education*, *32*(1), 77-91. Retrieved from http://search.proquest.com/openview/5fe5eba89f66d27e75b3b5ed4c80ae1b/1?pq-origsite=gscholar

Stairs, M., & Galpin, M. (2010). Positive engagement: From employee engagement to workplace happiness. In P. A. Linley, S. Harrington and N. Garcea (Eds.), *Oxford Handbook of Positive Psychology at Work* (pp. 155-172). New York, NY: Oxford University Press.

Steenland, K., Johnson, J., & Nowlin, S. (1997). A follow-up study of job strain and heart disease among males in the NHANES1 population. *American journal of industrial medicine*, *31*(2), 256-259.

Taris, T.W., Leisink, P.L.M. & Schaufeli, W.B. (2017). Applying occupational health theories to educator stress: Contribution of the Job-Demands Resources model. In T. McIntyre, S. McIntyre and D. Francis (Eds), *Educator stress: An occupational health perspective* (pp. 237-259). Heidelberg: Springer.

Terre Blanche, M., Durrheim, K., & Painter, D. (2009). *Research in practice: Applied methods for the social sciences* (2nd ed.). Cape Town, South Africa: University of Cape Town Press.

Tims, M., Bakker, A. B., Derks, D., & Van Rhenen, W. (2013). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management*, *38*(4), 427-454. Retrieved from: https://www.researchgate.net/profile/Maria_Tims2/publication/258138174_Job_Crafting_at_the_Team_and_Individual_Level_Implications_for_Work_Engagement_and_Performance/links/53ce6bf10cf2b8e35d1485f5/Job-Crafting-at-the-Team-and-Individual-Level-Implications-for-Work-Engagement-and-Performance.pdf

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout and engagement: The role of basic psychological need satisfaction. Work & Stress, 22, 277–294

Van Dierendonck, D., Schaufeli, W.B. & Buunk, B. P. (1993). The evaluation of an individual burnout intervention program: The role of inequity and social support. *Journal of Applied Psychology, 83*,392-407

Van Horn, J. E., Schaufeli, W. B., & Enzmann, D. (1999). Teacher Burnout and Lack of Reciprocity 1. *Journal of applied social psychology*, *29*(1), 91-108.

Varian, H. (2005). Bootstrap tutorial. *Mathematica Journal*, *9*(4), 768-775.

Vazi, M. L., Ruiter, R. A., Van den Borne, B., Martin, G., Dumont, K., & Reddy, P. S. (2013). The relationship between wellbeing indicators and teacher psychological stress in Eastern Cape public schools in South Africa. *SA Journal of Industrial Psychology*, 39(1). Retrieved from http://sajip.co.za/index.php/sajip/article/view/1042

Ventura, M., Salanova, M., & Llorens, S. (2015). Professional self-efficacy as a predictor of burnout and engagement: The role of challenge and hindrance demands. *The Journal of Psychology, 149*(3), 277-302.

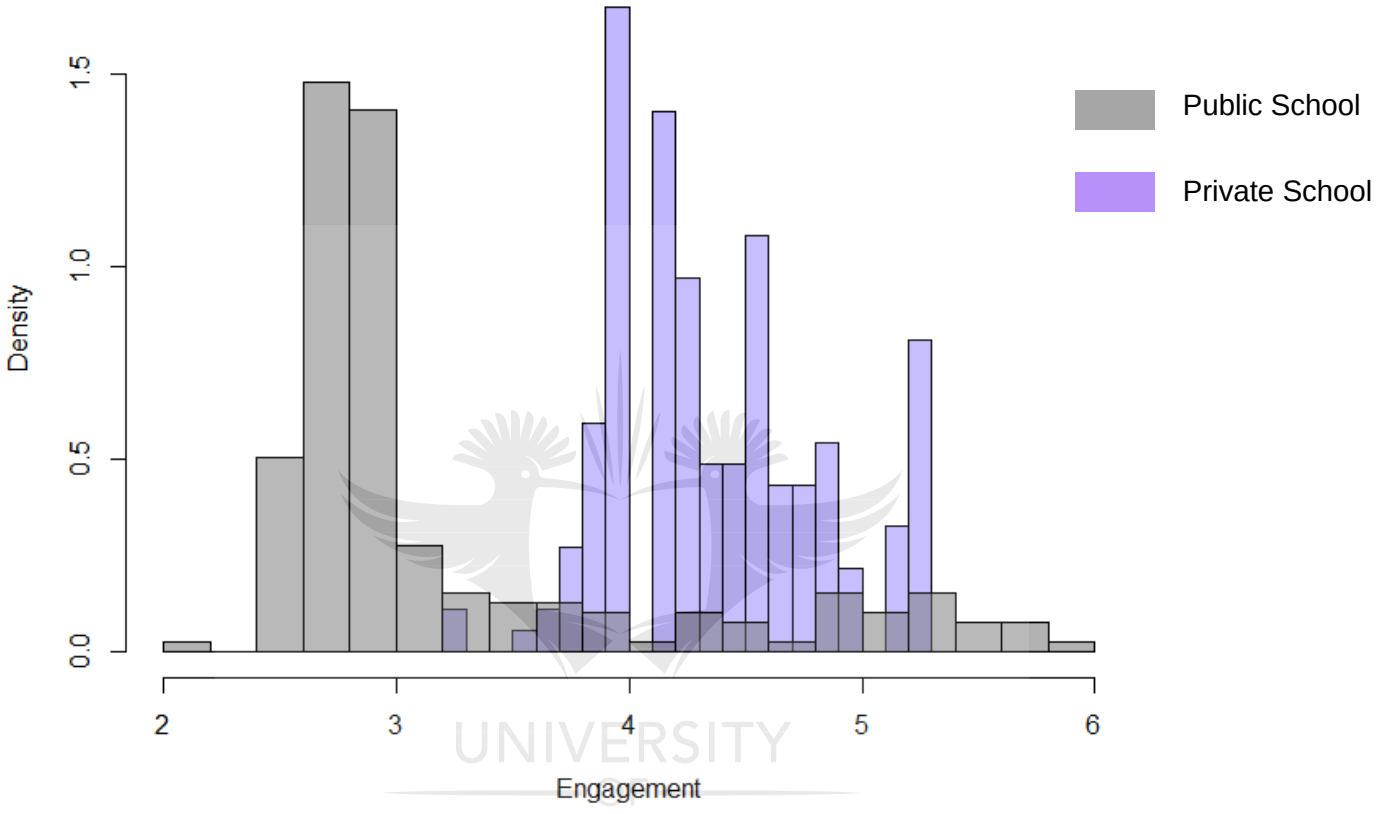
Wagner III, W. E. (2019). *Using IBM® SPSS® statistics for research methods and social science statistics*. Sage Publications.

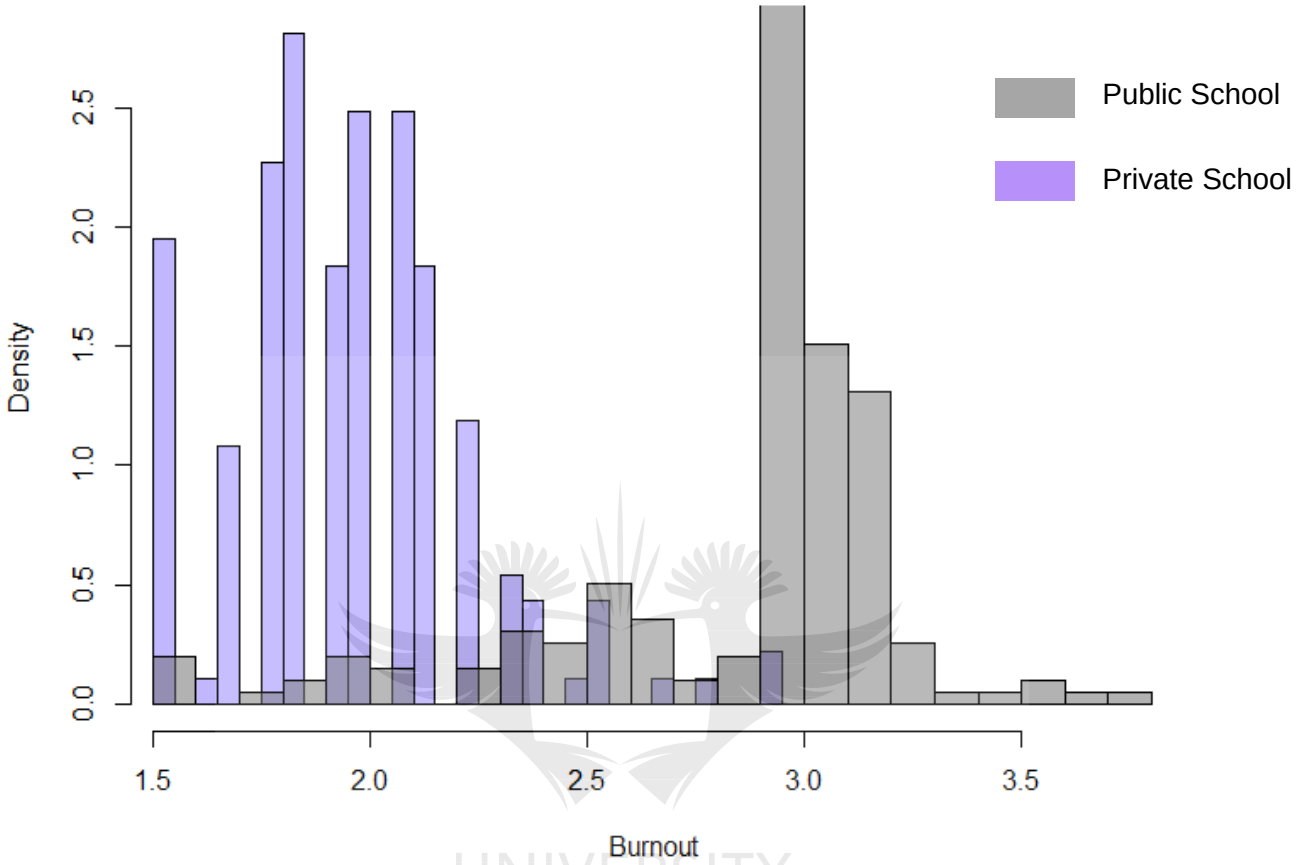
Walton, E., Nel, N., Hugo, H., & Muller, H. (2009). The extent and practice of inclusion in independent schools in South Africa. *South African Journal of Education*, *29*(1), 105-126. Retrieved from https://www.ajol.info/index.php/saje/article/viewFile/25184/4382

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational behavior*, *74*(3), 235-244.

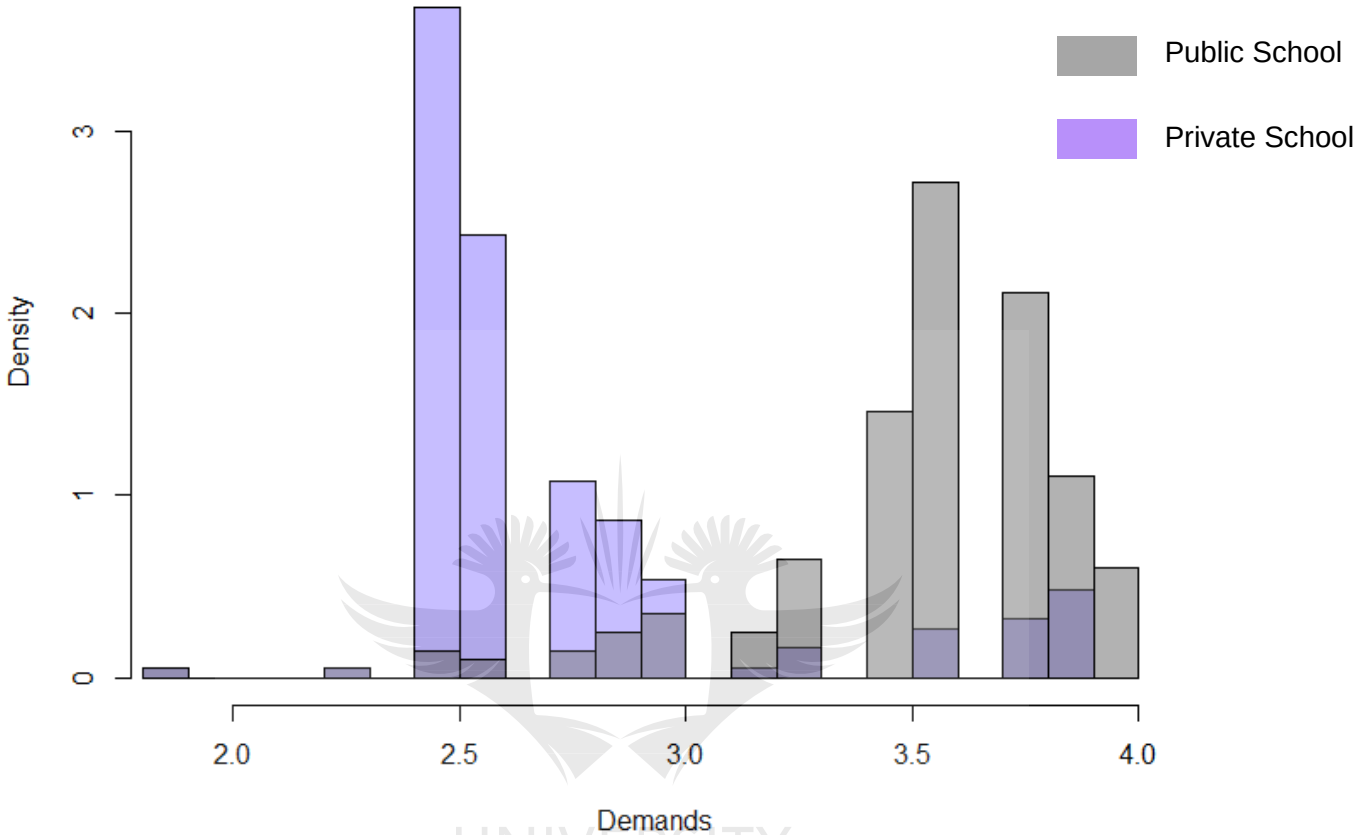
Zikmund, W.G. 2003. *Exploring Marke/ing Research.* Eighth edition. South-Western, Ohio.

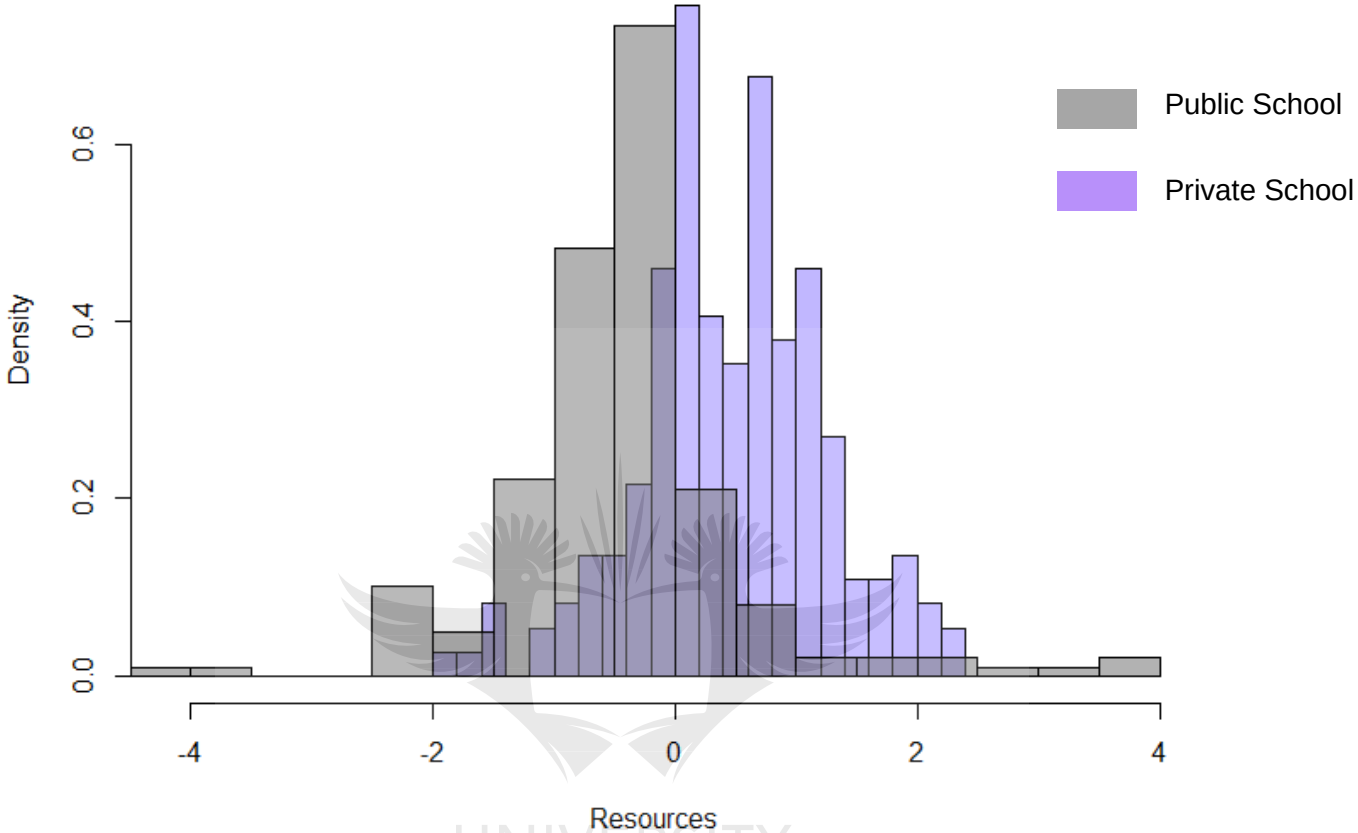
Appendix A (Histograms)





Public School





Appendix B (Cover letter and Questionnaire)

The Principal/Teacher

Dear Sir/Madam

Master's in Industrial Psychology Programme: *Research Dissertation*

I am writing to you to introduce myself as a Master's student in Industrial Psychology, who, as part of my MA (Industrial Psychology) programme, is required to complete a research dissertation that will add value in the field of Industrial Psychology. We have identified the well-being of teachers as an important focus area. The study focuses on the work engagement and burnout of teachers in public and private schools. The main aim of the research is to find whether there are differences with teachers in private and public schools in their levels of work engagement and burnout based on the job demands–resources model.

Consequently, I ask that you look favourably to my request for an opportunity to access the participants (educators) of your school to enable me to conduct the research with your permission as well as theirs. This part of the research is the data collection phase where I will be distributing questionnaires that will enquire about the manner in which they feel engaged to their work and the manner to which they feel exhausted or disengaged to their work.

Being a psychologist in training, ethical consideration (confidentiality and anonymity) will be a priority. There is no risk of any nature to any person, group or organisation (school) who will be participating in the study. I will not require any sensitive or competitive information from the school, the purpose of my request is purely data collection (in the form of questionnaires).

I will be willing to provide general feedback of the general nature of the study, should this be required or deemed as useful to you or the organisation (school).

Finally, should you require any additional information, please feel free to engage with me further or contact me Bonhle Moremi directly at bontlem.moremi13@gmail.com or my supervisor Dr Crystal Hoole at CrystalH@uj.ac.za

I would greatly appreciate your consideration to my request.

Sincerely, Thuladu Bonhle Moremi

Faculty of Management

Department of Industrial Psychology and People Management

Dear Participant

Thank you for taking the time to participate in this study. We want to know about your experiences, feelings, behaviours and thoughts at work.

Please read these instructions carefully before starting the study:

1. Make sure that you are in a quiet space where you can spend uninterrupted time on this study.
2. Take your time and answer the questions carefully.
3. The answers you will provide are very important and valuable for our research. We thus ask you to give your full attention to the survey.
4. These questions don't have right or wrong answers. We are only interested in your honest opinions.

My Agreement

1. I willingly agree to participate in this study.
2. I understand that I can discontinue with the questionnaire at any point in time without adverse conditions for me.
3. I understand that taking this questionnaire is up to me and it is okay if I change my mind and want to stop.
4. I understand that any personal information I provide in this survey will be kept confidential.
5. I understand that I can ask any questions that I have about the study at any time by contacting:
    a. Bontle Moremi at bontlem.moremi13@gmail.com
    b. Dr Crystal Hoole at CrystalH@uj.ac.za

We guarantee the confidentiality of your information. To indicate that you agree to participate and that your information can be used for research purposes, please tick in the box below:

I agree to participate in this study and give consent that the information I provide in this questionnaire can be used for research purposes: ☐

Thank you. Please read the instructions and complete the questionnaire.

SECTION A

Biographical Section: Please answer the following questions. Where options are provided, please make a cross in the block that most applies to you.

1. What is your gender?	1. Male				2. Female						
2. What is your marital status?	1.)Single		2.)Married/ Living with Partner		3.)Divorced						
	3.)Widow/ widower		4.)Remarried		5.)Separated						
3. Please indicate your South African Ethnicity:	1.)African		2.)White		3.)Coloured						
	4.)Indian		5.)Asian		6.)Other:						
4. Please indicate your home language:	1.)English		2.)Afrikaans		3.)Sepedi		4.)IsiNdebele				
	5.)Tshivenda		6.)IsiZulu		7.)Sesotho		8.)Setswana				
	9.)IsiXhosa		10.)Xitsonga		11.)Siswati		12.)Other:				
5. What is your highest level of education?	1.) Grade 12		2.)Bachelors/ B.tech/ Diploma		3.)Honours/ Postgraduate						
	4.)Master's Degree		5.)Doctorate Degree								
6. Please state the nature of your contract	1.)Full-time		2.)Part-time								
7. Please give a rough estimate of how long it takes you to travel to and from work	1.) 30 min		2.) 1hr		3.)1 hr 30 min		4.)2hrs				
	5.)2 hrs 30 min		6.)3 hrs		7.)More than 3 hrs						
8. Do you work in a private or public school?	1.)Private School		2.)Public School								
9. How old are you?	1.) 25 years or younger		2.)26 – 35 years		3.)36 – 45 years						
	4.)46 – 55 years		5.)56 – 65 years		6.)65 or more years						
10. How long have you been working in your current organisation?	1.)Less than 1 year		2.)1 – 2 years		3.)2 – 5 years						
	4.)6 – 10 years		5.)11 or more years								
11. How long have you been working in your current position?	1.)Less than 1 year		2.)1 – 2 years		3.)2 – 5 years						
	4.)6 – 10 years		5.)11 or more years								
12. How many students/learners do you have in your class?	1.)Up to 10 learners		2.)11 – 20 learners		3.)21 – 30 learners						
	4.)31 – 40 learners		5.)41 or more learners								

SECTION B (Questionnaires)

Work Engagement

The following 9 statements relate to how engaged you feel at work *(how you experience your work as stimulating, meaningful and something on which you fully concentrate on*). Please read each statement carefully and decide how you feel about the job.

	Never	Almost never	Rarely	Sometimes	Often	Very often	Always
1. At my work, I feel bursting with energy	0	1	2	3	4	5	6
2. At my job, I feel strong and vigorous.	0	1	2	3	4	5	6
3. I am enthusiastic about my job.	0	1	2	3	4	5	6
4. My job inspires me.	0	1	2	3	4	5	6
5. When I get up in the morning I feel like going to work.	0	1	2	3	4	5	6
6. I feel happy when I am working intensely.	0	1	2	3	4	5	6
7. I am proud of the work that I do.	0	1	2	3	4	5	6
8. I am immersed in my work.	0	1	2	3	4	5	6
9. I get carried away when I am working.	0	1	2	3	4	5	6

Burnout

The following 16 statement relate to your level of exhaustion. Please read each statement carefully and decide with which statements you may agree or disagree

	Strongly agree	Agree	Disagree	Strongly disagree
1. I always find new and interesting aspects in my work.	1	2	3	4
2. There are days when I feel tired before I arrive at work.	1	2	3	4
3. It happens more and more often that I talk about my work in a negative way.	1	2	3	4
4. After work, I tend to need more time than in the past in order to relax and feel better.	1	2	3	4
5. I can tolerate the pressure of my work very well.	1	2	3	4
6. Lately, I tend to think less at work and do my job almost mechanically.	1	2	3	4
7. I find my work to be a positive challenge.	1	2	3	4
8. During my work, I often feel emotionally drained.	1	2	3	4
9. Over time, one can become disconnected from this type of work.	1	2	3	4
10. After working, I have enough energy for my leisure activities.	1	2	3	4
11. Sometimes I feel sickened by my work tasks.	1	2	3	4
12. After my work, I usually feel worn out and weary.	1	2	3	4
13. This is the only type of work that I can imagine myself doing.	1	2	3	4
14. Usually, I can manage the amount of my work well.	1	2	3	4
15. I feel more and more engaged in my work.	1	2	3	4
16. When I work, I usually feel energized.	1	2	3	4

Job Demands - Resources

Organisational Support

The following 12 questions refer to your relationship with the supervisor, ambiguities regarding work, information, communication, participation and contact possibilities. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
1. Do you receive sufficient information on the results of your work?	1	2	3	4
2. Do you receive sufficient information on the purpose of your work?	1	2	3	4
3. Does your direct supervisor inform you about how well you are doing?	1	2	3	4
4. Do you know exactly what your supervisor thinks of your performance?	1	2	3	4
5. Are you kept adequately up-to-date about issues in the Department?	1	2	3	4
6. In your work, do you feel appreciated by your supervisor?	1	2	3	4
7. Do you get on well with your supervisor?	1	2	3	4
8. Do you know exactly what other people expect of you in your work?	1	2	3	4
9. Can you discuss work problems with your direct supervisor?	1	2	3	4
10. Can you count on your supervisor when you come across difficulties?	1	2	3	4
11. Do you know exactly for what you are responsible and what not?	1	2	3	4
12. Can you participate in decisions about the nature of your work?	1	2	3	4

Growth opportunities

The following 7 questions refer to the variety in your work, opportunities to learn and independence in your work. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
13. Does your job offer you the possibility of independent thought?	1	2	3	4
14. Do you have freedom in carrying out your work activities?	1	2	3	4
15. Does your work give you the feeling that you can achieve something?	1	2	3	4
16. Do you have any influence in the planning of your work activities?	1	2	3	4
17. Does your work make sufficient demands on all your skills?	1	2	3	4
18. Does your job offer you opportunities for personal growth?	1	2	3	4
19. Do you have enough variety in your work?	1	2	3	4

Overload

The following 7 questions refer to the pace and amount of work, mental load and emotional load. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
20. Do you work under time pressure?	1	2	3	4
21. Do you have to be attentive to many things at the same time?	1	2	3	4
22. Do you have too much work to do?	1	2	3	4
23. Do you have to remember many things in your work?	1	2	3	4
24. Are you confronted in your work with things that affect you personally?	1	2	3	4
25. Does your work put you in emotionally upsetting situations?	1	2	3	4
26. Do you have contact with difficult children in your work?	1	2	3	4

Job insecurity

The following 3 questions refer to uncertainty about the future. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
27. Do you need to be more secure that you will keep your job next year?	**1**	**2**	**3**	**4**
28. Do you need to be more secure that you will still be working in one year?	**1**	**2**	**3**	**4**
29. Do you need to be more secure that you will keep your level next year?	**1**	**2**	**3**	**4**

Relationship with colleagues

The following 3 questions refer to the availability of colleagues to help, whether they could be counted on and whether you get on well with them. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
30. If necessary, can you ask your colleagues for help?	**1**	**2**	**3**	**4**
31. Can you count on your colleagues when you come across difficulties?	**1**	**2**	**3**	**4**
32. Do you get on well with your colleagues?	**1**	**2**	**3**	**4**

Control

The following 5 questions refer to communication, participation and contact possibilities. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
33. Does your job give you the opportunity to be promoted?	**1**	**2**	**3**	**4**
34. Is it clear whom you should address within the Department?	**1**	**2**	**3**	**4**
35. Do you have a direct influence on your school's decisions?	**1**	**2**	**3**	**4**
36. Is the Department's decision-making process clear to you?	**1**	**2**	**3**	**4**
37. Do you have contact with colleagues as part of your work?	**1**	**2**	**3**	**4**

Rewards

The following 4 questions refer to whether you can live comfortably on your pay, whether it is regarded as sufficient and whether the salary enables employees to progress financially. Please read each question carefully and respond accordingly.

	Never	Rarely	Often	Always
38. Can you live comfortably on your pay?	**1**	**2**	**3**	**4**
39. Do you think you are paid enough for the work that you do?				
40. Does your job offer you the possibility to progress financially?				
41. Do you think that the Department pays good salaries?				

Please state which factors you perceive to have the greatest effect on you and how you perceive your work.

_____

_____

_____

_____

*****Thank you very much for your participation!*****